HISTORY
OF
FALL RIVER
MASSACHUSETTS

PRES

GEORGE B.

Fall River

"GLOBE COTTON MILL" ERECTED 1811

HISTORY OF FALL RIVER

MASSACHUSETTS

COMPILED FOR THE

COTTON CENTENNIAL

BY HENRY M. FENNER

UNDER THE DIRECTION OF THE

HISTORICAL COMMITTEE

OF THE MERCHANTS ASSOCIATION

EDWARD S. ADAMS, Chairman

GEORGE H. EDDY
BENJAMIN BUFFINTON
WILLIAM T. HENRY
LEONTINE LINCOLN
PHILIP D. BORDEN
JOHN J. McDONOUGH

FALL RIVER MERCHANTS ASSOCIATION
1911

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Published May, 1911.

The Munroe Press, Fall River, Massachusetts.

The observance of the one hundredth anniversary of the beginning of cotton manufacturing in Fall River has seemed to the Merchants Association a fitting occasion for the publication of a concise history of the community. Its historical committee has therefore prepared the pages which follow, in the hope of making the history of the city better known by its citizens and the thousands of visitors within its gates, as well as by many others to whom copies may be sent by friends.

The book has been prepared and published in less than two months, and has of necessity been made brief. A strong effort has, however, been made to secure accuracy, and to include all the principal facts in connection with the city's development. The original spelling of names has been retained in many cases, and incidents of interest have in some instances been interwoven.

The committee hopes that its work may be the basis of a more extensive history of Fall River. The story of its growth is an inspiration to greater things, and deserves to be more generally known.

FALL RIVER, in population the third city of the Commonwealth of Massachusetts, situated in the southeasterly section of the state, is in North Latitude 41° -42′-04″+ and W. Longitude 71° -09′-20″ +. The distance in a direct line from the State House in Boston to the City Hall in Fall River being 45.58 miles.

The city is located on the easterly shore of Mount Hope Bay and Taunton River, bounded northerly by Freetown, easterly by Freetown, Dartmouth and Westport, southerly by Dartmouth, Westport and Tiverton, R. I., westerly by Tiverton, R. I. and the channel of Mount Hope Bay and Taunton River. Within these limits there is included an area of nearly 41 square miles, consisting of approximately 33.94 miles of land, 4.43 miles of fresh water and 2.5 miles of salt water. Its extreme length approximates 11 miles and its width $7\frac{1}{2}$ miles. Its shape is very irregular and somewhat peculiar, as seen in the illustration.

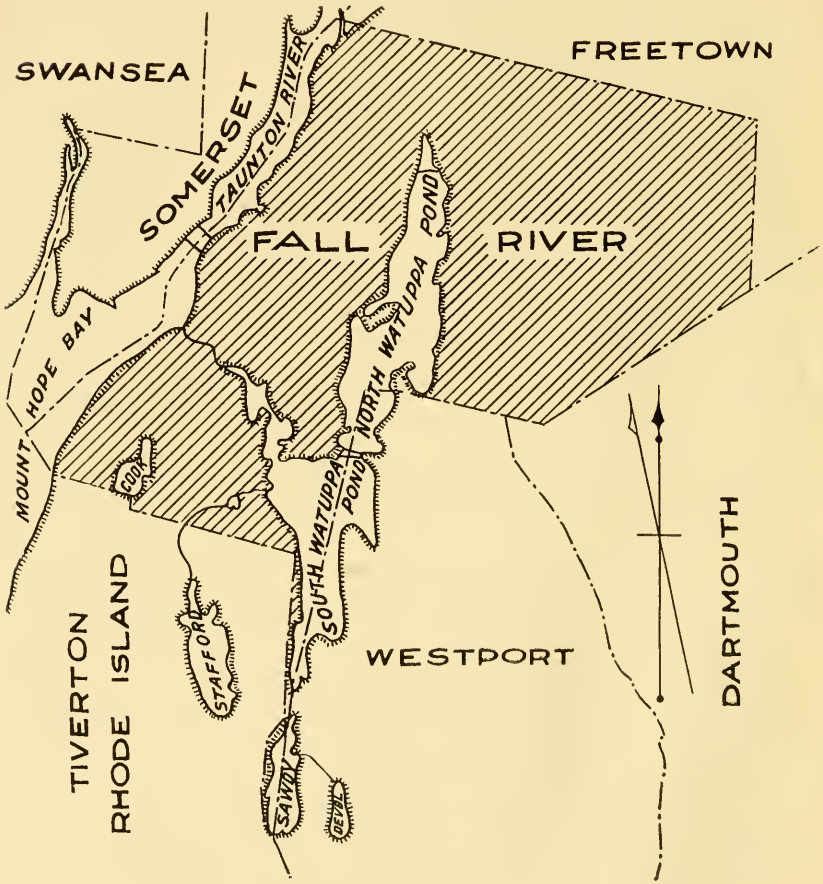
A study of the drawing will explain the cause of the long continued controversy as to the location of the "centre of Fall River."

From the water front the rise is, as a rule, abrupt. South Main street in front of City Hall (less than one-half mile from the shore) is at an elevation 119 feet above mean high water in Taunton River. Townsend Hill (so-called) on the easterly side of South Main Street near the Rhode Island Line, (less than three-fourths of a mile from the shore) has an elevation of 272 feet. Highland Avenue at its junction with New Boston Road is at an elevation of 254 feet.

The highest point within the city limits is Copicut Hill, about 5 miles northeasterly from City Hall, where an elevation of 355 feet is reached.

The city's water supply, North Watuppa Pond, having an area of 2.82 square miles and an extreme depth of 27 feet, is one of the best in the State, judged both as to quantity and quality. The water shed of the pond (including the area of

the pond itself) is 11.444 square miles. Its capacity at full pond is 7,199,907,200 Gallons. At 5 feet below full pond (a depth approximated but once since the installation of the water works) its capacity is 4,488,189,500 Gallons. From these figures it would appear that danger of a water famine is very remote.



The sewerage of the city is, as a whole, on the "Combined System," that is, the sewers are planned to care for storm water as well as for domestic sewage. There are, however,

limited areas in which separate systems are maintained, the object being to furnish as much of the storm water as is possible for use by the mills along Quequechan River.

Underlying much of the city are granite ledges from which material for construction of buildings, making of street curbing, paving, etc., is obtained. While this is a valuable asset for the city, it is not an unmixed blessing, as this same granite accounts for what, to some, appears to be an unreasonable cost of sewers, water works, and other lines of work requiring the building of underground structures.

The city has one natural curiosity of considerable interest, the "Rolling Rock" on County street, referred to in old bounds as "The Goose-nesting Rock." It is a boulder of coarse conglomerate, resting on a ledge of granite, and showing that it was brought to its present position by diluvial action. It was so finely balanced that until recent years it could be easily moved by one hand, and by using both hands could be made to oscillate two or three inches at the top. It is eight feet thick, with a horizontal circumference of 58 feet. Its estimated weight is 140 tons.

Fall River to-day is a beautifully situated city of approximately 120,000 inhabitants. It is a busy, prosperous and growing community, which in half a century has risen, through its own efforts from a little town of about 13,000 people to its present prominence. Its citizens are justly proud of it and of its growth, and, inspired by what they have done, look forward with confidence to even greater achievements.

It is known as the largest cotton manufacturing center in the United States, and its more than 100 mills, containing nearly 4,000,000 spindles, give employment to 35,000 persons. Its factories use about 450,000 bales of cotton a year, or 9,000 a week, from which are produced more than a thousand million yards of cloth in a year, or three and a half million yards each working day. Reduced to miles, this means 1900 miles of cloth a day, or three miles a minute.

But it is not alone of the quantity of its product that the

city boasts. It produces many medium weight goods to meet the various demands of the market, as well as twills, sateens and curtains, and its newer mills have almost exclusively been designed for the making of fine goods, and more and more of the finest fabrics are being manufactured each year; also fine ginghams, colored yarns, sewing thread, Marseilles quilts and cloths with finishes of linen and silk.

It has bleacheries and print works, one of the latter, the American Printing Company, the largest in the United States, with an extensive and increasing export trade. It has plants for the manufacture of its own machinery, plants for the utilization of the waste cotton in the manufacture of rope, twine, mops and "comforters" and plants for the making of cotton bags and narrow fabrics. It has, among others, the largest hat manufacturing establishment in the country, and also an extensive piano factory.

Though in recent years large numbers have come here from foreign lands, the best of order is maintained. The newcomers are acquiring homes of their own and doing their part in the upbuilding of the city.

The community is well policed and well lighted. It maintains an efficient fire department, and the annual loss by fire is comparatively small. Its schools are modern, housed in commodious, beautiful and well arranged structures. The system is supplemented by a large and well equipped textile school. It has a public library of 86,000 volumes, in a new and centrally located building, with 22,834 cardholders and an annual circulation of more than 200,000 volumes.

It has parks and playgrounds of more than 100 acres, situated in various parts of the city, 73 miles of sewers and 16½ miles of paved streets.

Its situation near the coast gives it an excellent climate. Severe storms are almost unknown. Its winters are not severe, and its summers are cool. From the higher parts of the city, views of marked beauty are obtainable over the adjoining bay and rivers and across the farming lands on the west side of the river, and on clear days Providence can be seen in the distance. Many of the sunsets are almost unsurpassed.

It has charming residential sections, scores of churches, and numerous charitable institutions, housed in most attractive buildings, of which the Boys' Club, the Young Men's Christian Association, the Women's Union, the Union and Ste. Anne's Hospitals, the Children's Home, the St. Joseph's and St. Vincent's orphanages, the Home for Aged People and the Bishop Stang Day Nursery are examples.

Many of its stores are large, and well arranged and compare favorably with those in other cities. Its Merchants Association has a large and active membership, and has done much for the city.

There are four national banks, with a combined capital of $2,200,000 and deposits in excess of $6,000,000, a trust company with deposits of more than $2,000,000, four savings banks that hold nearly $23,000,000 for 55,000 depositors, and four co-operative banks, whose assets are in excess of $2,000,000.

Four daily newspapers are published here, the Evening News, established as a weekly in 1845 and as a daily in 1859, the Herald, started in 1872, the Globe, in 1885 and L'Independant, printed in French, and founded in 1885. There are also two weeklies, issued in Portuguese, called As Novidades and O Amigo do Poro.

The city has excellent transportation facilities, both by rail and water. It has deep water to its wharves and regular lines of steamers to New York, Philadelphia and Providence, including the famous Fall River Line, whose magnificent fleet is well and favorably known to the travelling public.

It has a modern street railway system, with suburban roads to Providence, Taunton, New Bedford and Newport, and excellent train and electric car service to these and other cities.

Its assessed valuation in 1910 was $92,488,520, and its tax rate, which includes all charges, except in the case of granolithic sidewalks, which are put in on application of abutting owners, was $18.70 per thousand.

The territory included in the city of Fall River was formerly a part of the colony of Plymouth, and remained so until that colony was united with Massachusetts in 1692. Like the remainder of New England, it was inhabited by Indian tribes, and, until after King Philip's war in 1676, when the spirit of the Indians in this section was finally broken and many of them exterminated, there were but very few, if any, white settlers.

The coast of North America had been skirted as early as 1498, six years after the discovery by Columbus, by Sebastian Cabot, a fact on which the English based their title. Much earlier, however, this immediate section had probably been visited by the Northmen, whose sagas relate that in 1008 a party led by Thorfinn had come up the Sagkonate, now Seaconnet river and spent the winter on Mount Hope Bay, where they traded with the natives. Whether they placed the inscriptions on the rock at Dighton is a question which in all probability will never be satisfactorily answered. Another early visitor was a Florentine, Joseph Verrazzano, who was under the patronage of the French king, Francis I, and who, with a party of 50 men, in the ship Dauphin, is said to have entered Narragansett Bay in 1524 and remained for 15 days.

The natives who dwelt in this vicinity were the Pocassets, a sub-tribe of the Wampanoags, and a part of the great Algonquin nation. At the time of the Plymouth settlement, Massasoit, the father of King Philip, otherwise known as Metacomet, was sachem of the Wampanoags, and Corbitant of the Pocassets. Corbitant's principal place of residence was at Mattapoisett, now Gardner's Neck, in Swansea. He was not friendly to the whites, but was kept in check by Massasoit, and on his death in 1624 was succeeded by his daughter, Weetamoe, who was drowned in 1676 while crossing the Tehticut, now the Taunton river, at Slade's Ferry. She was the wife of Wamsutta, an elder brother of Philip.

Of other more familiar Indian names, Annawan was one of Philip's captains, Canonicus, the chief of the Narragansetts, who dwelt on the west side of the bay which bears their name,

Montaup, the name of Mount Hope, Quequechan, signifying "Falling Water", the title of the stream which flows through the center of the present city, Quequeteant, the name of the neighborhood adjoining the Quequechan, Watuppa the name of the ponds still known by the same designation. Sagkonate was the Indian name for what is now Little Compton and Sagamore was the title of a chief. Tecumseh was the head of an Indian tribe in the West.

The Wampanoags appear to have been on the whole a superior race. They were long friendly to the whites and hospitable. They are described as having the familiar cinnamon colored skin, long black, coarse hair, scanty beard, high cheek bones, small, deep-set eyes, a broad nose, protuberant lips and a square, depressed forehead. They were tall, supple, graceful, agile, and able, it is said, to run 80 or 100 miles a day and back the next, but they were unequal to continuous labor. They had the same immobility of countenance that is characteristic of all red men, and seldom wept or smiled. The deaf, the blind and the lame were seldom seen; these were too burdensome to the others to be allowed to live. As a rule, an Indian had but one wife. The women did the drudgery, while the men hunted and fished.

Their clothing in winter consisted of skins of deer or other wild animals; in summer, when less was required, the men wore only a piece of deer skin about their waists. Moccasins were of thin deer skin or moose hide, according to the season. Paint and feathers were their adornment, combined with rings, bracelets and necklaces.

Fish, game, nuts, berries and roots, were their principal food. Meat could be preserved only by smoking, as they had no salt. With the aid of but a single tool, a hoe made of a clamshell or bone fastened on the end of a stick, they cultivated the soil and raised Indian corn, squashes, pumpkins, beans and a kind of sunflower, the root of which pleased their taste. Tobacco was also cultivated for smoking. The potato was unknown, and the only domestic animal was the dog. They had no poultry.

The following description of an Indian village in New England at this time is taken from a recent work on King Philip's war by Ellis and Morris:

"Arranged around a center left open for the performance of the village games and ceremonies, were the wigwams, constructed of saplings, which, set firmly in the ground and bent together, were fastened at the top and covered with bark or mats. Some were cone-shaped, holding only a single family, while others, resembling a covered arbor, varied in length from 20 to 100 feet.

The wigwams were pitched closely together, and the village seldom occupied more than from three to four acres. Within the wigwams, and arranged around the walls, were the woven baskets that held the corn, stone or earthen household utensils, the pails and the low raised bunks covered with boughs and skins. In the center blazed the fires, which, either for the purpose of cooking or for warmth, were kept constantly alight, and the smoke from which found its way skyward through a hole in the roof."

Their axes and most of their household utensils were of stone, as were the bowls of their long pipes. Their fish lines were of twisted fibres of the dogbane or of sinews of the deer, the hooks, of sharpened bones of fishes or birds. Arrows were tipped with bone, claws of the larger birds, or flint. Spears were made in the same way. The tomahawk was a wooden club, some two feet long, with a large knob at the end. The money known as wampum was of small round beads made of shells, drilled so that they could be strung. A species of football, quoits, wrestling and dancing, combined with gambling, fishing and the hunt, furnished amusement. Their language was guttural, with words of great length.

Some corn was preserved for the winter by burying it in the ground, under a covering of bark, and some basketry and pottery were made, but on the whole they were slothful and improvident. After the coming of the whites they obtained some of the articles of civilization, which made their lives easier, but from them they also secured liquor, which they had not known before.

This last fact made it early necessary for the colony of Massachusetts Bay to pass stringent regulations forbidding the sale of intoxicants to the natives and a penalty of 40 shillings was provided for every pint sold or delivered,

"except in cases of sudden exigent, faintness, or sickness, not to exceed two drams." An Indian found drunk was to be fined five shillings or openly whipped. Similar legislation was passed by the Plymouth colony, which in 1658, forbade, on penalty of a fine of ten shillings, the sale of liquor to Indians, and directed that Indians found drunk should be set in the stocks, and should be required to pay charges of two shillings, six pence.

The first land bought from the natives was known as the Freemen's Purchase, and was secured under a grant made by the general court of Plymouth to 26 residents of that town in 1656. The deed was dated April 2, 1659 and signed by Wamsutta and Weetamoe, or Tattapanum, his wife. It conveyed all the land with one small exception, between the Quequechan river and the present northern boundry of Freetown, a distance of eight or nine miles, and extending back from the Taunton river about four miles. In other words, it included all of what is now Fall River north of the line of Bedford street, and all of Freetown. The price paid was 20 coats, two rugs, two iron pots, two kettles and one little kettle, eight pairs of shoes, six pairs of stockings, one dozen hoes, one dozen hatchets, two yards of broadcloth and the satisfaction of a debt from Wamsutta to John Barns.

With reference to the price paid for this large tract of land, the following quotation from G. E. Ellis is in point:

"When we read of the earliest so-called 'deeds' by which the English colonists obtained from the sachems wide spaces of territory on the consideration of a few tools, hatchets, kettles or yards of cloth, we naturally regard the transaction as simply illustrating the white man's rapacity and cunning in tricking the simplicity of the savage. But we may be sure that in many such cases the Indian secured what was to him a full equivalent for that with which he parted. For, as the whites soon learned by experience, the savages supposed that in such transactions they were not alienating the absolute ownership of their lands, but only covenanting for the right of joint occupancy with the English. And then the coveted tools or implements obtained by them represented a value and a use not measurable by any reach of wild territory. A metal

kettle, a spear, a knife, a hatchet transformed the whole life of a savage. A blanket was for him a whole wardrobe. When he came to be the possessor of firearms, having regarded himself the equal of the white man, he at once became his superior."

The purchasers were Captain James Cudworth, Josiah Winslow, Sr., Constant Southworth, John Barns, John Tesdale, Humphrey Turner, Walter Hatch, Samuel House, Samuel Jackson, John Daman, Timothy Hatherly, Timothy Foster, Thomas Southworth, George Watson, Nathaniel Morton, Richard Moore, Edmund Chandler, Samuel Nash, Henry Howland, Ralph Partridge, Love Brewster, William Paybody, Christopher Wadsworth, Kenelme Winslow, Thomas Bowen and John Waterman. The deed was later confirmed by the Plymouth government, and the lots divided among the purchasers in 26 shares, each with a frontage of about 100 rods on the river and running back to the easterly bound. Timothy Foster had the lot nearest the Quequechan and Humphrey Turner the next. Beyond him in order were Wadsworth, Chandler, House, Howland and Watson.

Matthew Boomer was probably the first settler in this tract, having bought a part of the fourth lot in March, 1676, and erected a dwelling near the corner of North Main and Brownell streets soon after. John Read came from Newport, and in 1686 was living where St. Joseph's church stands. George Lawton, Samuel Gardner of Newport, Henry Howland of Duxbury, Robert Durfee, Hugh Woodberee and William Chase also settled here soon after King Philip's war. After the inhabitants had been established as a township under the name of Freetown by act of the Plymouth colony in July, 1683, Gardner was made town clerk and later purchased what is now known as Gardner's Neck at South Swansea.

The land south of the Freeman's Purchase, including the present town of Tiverton, and extending back from the bay four to six miles, with certain exceptions of small tracts previously sold, was conveyed from the Plymouth government March 5, 1679-80, in consideration of 1100 pounds, English money, to Edward Gray of Plymouth, Nathaniel Thomas of Marshfield, Christopher Almy, Job Almy and Thomas Waite of

Portsmouth and Benjamin Church, Daniel Wilcox and William Manchester of Puncatest.

The "mill right" a strip of land about 30 rods wide along the Quequechan river extending back from the bay one mile was held in common and sold in shares. Several divisions were made of the remainder. The first was in 1682-3, when the so-called "great lots" were laid out, in most cases 52 rods wide and running back one mile from the bay to what is now Plymouth avenue, formerly called Eight Rod Way. Edward Gray was the first individual owner of lots one and two and William Manchester of number three. Later the land between Plymouth avenue, the Watuppa pond and the Quequechan river was divided into "six-score acre lots" and in 1697 a third division took place.

The tract which also included land east of the Freeman's Purchase, was known as the Pocasset Purchase and was under the government of Plymouth till March 2, 1692, when it, with Puncatest, was incorporated by the state of Massachusetts as the town of Tiverton. The original freemen of the town were Major Church, John Pearce, John Cook, Gersham Woodle, Richard Borden, Christopher Almy, Thomas Cory, Stephen Manchester, Joseph Wanton, Forbes Manchester, Daniel Howland, Edward Gray, Edward Briggs, William Manchester, Amos Sheffield, Daniel Wilcox, Edward Colby, Joseph Tabor, David Lake, Thomas Waite, Joseph Tallman, John Briggs, John Cooke, William Almy, and John Cooke, Jr.

A question as to the location of the boundary line between Freetown and Tiverton, (that being the line between the Freeman and Pocasset purchases,) arose early in the eighteenth century, owing to indefiniteness in the Plymouth and Rhode Island charters, and a committee consisting of Job Winslow, Josiah Winslow, Robert Durfee, and Henry Brightman was chosen to represent the proprietors of Freetown, and Christopher Almy, Samuel Little, and Richard Borden to represent those of Tiverton.

This committee reported and fixed the line as follows: "Beginning at a cleft rock on the East side of the country road near the Fall River, said rock being the bounds of the Freeman's first lot and from said rock ranging southwest and

by West to the river at the westerly side of the country road, and from thence the river to be the bounds westerly unto Taunton river, and from the aforesaid rock ranging East South East four miles into the woods by a range of marked trees unto a heap of stones with several trees marked about it and from said heap of stones ranging Northeast and by North one degree northerly by a range of marked trees unto a stone set into the ground with other stones laid about it being the head of the four mile line from Stacy's Creek. Said range to extend until it meet with Middleboro town bounds. These aforesaid boundaries thus run and settled we do mutually agree shall be the perpetual bounds between the land of the aforesaid proprietors of Freetown and the proprietors of Tiverton."

This report was signed by all of the committee above named save Job Winslow, and was approved by act of the general court or assembly for his Majesty's province of the Massachusetts Bay in New England May 29, 1700.

The water power of the Quequechan had been recognized as of special value when the strip along its border was set aside as a "mill right," and Col. Benjamin Church and his brother Caleb, who had purchased a large part, erected a saw mill there before 1691. A few years later a grist mill and a fulling mill, the latter for cleansing home-grown wool preparatory to spinning and "fulling" or thickening the cloth, were erected on the west side of Main street, after the stream had been dammed. About 1714 the Churchs sold their interest to Richard and Joseph Borden, who thus secured control of the water power, which was retained in their family till the erection of the Troy mill and the Fall River manufactory in 1813. Prior to the Revolution another saw mill and a grist mill were erected at the foot of the hill, near the present No. 7 mill of the Fall River Iron Works Company.

Early in the century, also, a tannery was established by John Read on what is now called French's hill, where the Westport Mfg. Co.'s storehouse now stands. This was sold in 1801 by his heirs to Enoch French, who carried on business here till about 1840, and from whom the hill took its name.

Another tan yard stood on Bedford street, at the foot of Rock, where it was started in 1810 and carried on for many

years by Edmund Chase and his son, Edmund Chase, Jr., and discontinued in 1888.

The principal occupation was farming, though many small vessels were built and owned here, which gave employment to a considerable number of the citizens. The population was small, and a census of Freetown in 1765 showed but 1,492 inhabitants. In 1776 this had grown to 1,901 and in 1792 to 2,202. Tiverton about 1750 had 1,040 inhabitants, of whom 842 were whites, 99 negroes and 99 Indians.

The Friends were the largest religious denomination, with a meeting house erected in 1714, not far from the present location of the Crystal Spring Bleachery. The law of the state, nevertheless, required the town to have a Congregational minister, and this was a frequent topic of discussion at town meetings. Little sympathy was felt, apparently, with the statute, for the town was frequently indicted for not complying. The minister was at times also the school teacher, and, in fact, the first mention of schools in the Freetown records is in 1702, when Robert Durfee was authorized to secure a man to dispense the gospel and teach the children reading and writing. School houses first appear in the records in 1722 when two buildings were ordered erected. In 1727 a school building was authorized to be built, 18 feet by 14. In 1791 the town was divided into seven school districts and new buildings erected. That in the center was but 24x20. A Congregational meeting house had been built, in 1714, on the easterly side of the main road a few hundred feet south of the present line between Freetown and Fall River. It was 26x36 and was 18 feet between joints. The General Court contributed 20 pounds to the cost. The town stocks, erected in 1690, for the punishment of minor offenses, stood near.

Most of the Indians had met death in King Philip's War or had fled from the section, and the few that remained were friendly to the whites. Land for them was set aside on Stafford road in 1704, but a few years later they were transferred at their request to the reservation on the east side of the pond, called Indian Reservation. Here, however, through removal and intermarriage, their numbers rapidly decreased, until at the present time but one family remains on the reservation.

Just before the Revolution, Tory sentiment was strong, and at a town meeting on Jan. 26, 1774, resolutions were adopted severely condemning the town of Boston for allowing the destruction of tea in its harbor, and declaring that the town of Freetown, "abhorred, detested and forever bore testimony against such acts," as "riotous and mobish proceedings." By the late summer, however, the feeling had changed, and at a town meeting on September 19, delegates were selected to confer at Taunton with representatives of the other towns as to "measures proper" in the situation. At the meeting held in Taunton Sept. 28, resolutions were unanimously adopted that those present were "determined at the risk of their fortunes and their lives to defend their natural and compacted rights" and to "oppose to their utmost all illegal and unconstitutional measures which have been or hereafter may be adopted by the British Parliament or the British Ministry." Thirty-one men from Freetown responded to the Lexington alarm on April 19, 1775.

On May 10, 1775, the town voted to care for the families of poor soldiers. In March 1776, a committee of correspondence, inspection and safety was elected and boats were ordered built "To cross the river in, if our enemies should attack our friends on the opposite shore." At a town meeting July 15, 1776, strong resolutions were adopted declaring that loyalty to the king was treason against the people of this country and that "We are ready with our Lives and fortunes to support the General Congress in Declaring the united American Colonies free and independent of Greate Britain." The town approved the articles of confederation Feb. 10, 1777.

Colonel Joseph Durfee, who had taken an active part in the war, and who was afterwards to start the first cotton mill here, formed a home guard in the fall of 1777. Quarters were secured in a store near the shore, where the men met every day and called the roll, and sentinels were placed each night, to give an alarm, in case of the approach of the British, who then held the south end of the island of Rhode Island.

On Sunday morning, May 25, 1778, boats were discovered silently and cautiously approaching the shore. They were challenged but returned no answer, and one of the guard,

Samuel Reed, then fired upon them. This gave the alarm, and the whole neighborhood was soon in arms.

Col. Durfee stationed his men behind a stone wall and kept up a constant fire on the British until the latter brought their cannon to bear. The Americans retreated slowly to Main street, near the present location of city hall. Here a stand was made, and the enemy so roughly handled that they soon retreated, leaving behind them one dead and another dying, others wounded were carried with them.

The attacking force numbered about 150, and was commanded by Major Ayres. When they landed they set fire to the house of Thomas Borden, near the northeast corner of Pond and Anawan streets, and also to his saw mill and grist mill near the foot of the stream. On their retreat they fired the house and other buildings of Richard Borden, then an aged man, and took him prisoner. As they made their way down the bay the Americans continued to pour in a musket fire on them, and one British soldier was killed in the boats. Mr. Borden was released on parole after a few days.

In commemoration of this engagement Quequechan Chapter, D. A. R., placed a bronze tablet on the southwest corner of City Hall on May 25, 1899.

FALL RIVER A TOWN

After the Revolution, the town of Freetown grew steadily, and in 1800 had attained a population of 2,535. The residents of the southern part were now pressing to be set off as a separate community. Their chief argument, as set forth in a petition to the legislature dated Jan. 12, 1802, and signed by Thomas Borden and 155 others, was that they were nearly eight miles from the town meeting house at the north end of Freetown, that almost all of them were seafarers or tradesmen, who had no horses, thus making it difficult to attend meetings, that the three principal settlements were at the points of a triangle, and that owing to the long swamp which ran through the center of the town, no location for a town house equally convenient for all was possible.

At a town meeting on Feb. 4, 1802, a unanimous vote against division was adopted, but later reconsidered and a committee appointed to present a plan for division. That committee suggested a line about where the boundary was subsequently established, and the report was accepted.

The plan was opposed in the committee hearing at the state house and leave to withdraw reported. The house, however, appointed a special committee to visit the town and consider the matter, and this committee on Feb. 5, 1803, reported in favor of a division. A bill was presented and passed, and was approved by Governor Caleb Strong, Feb. 26, 1803, which divided the town as desired and incorporated the southerly part as Fallriver, spelled as one word. This name was not pleasing, however, to those citizens who did not live in the little community near the stream, and at a town meeting on May 19, 1804, it was voted to change the name to Troy, a word said to have been selected in consequence of a favorable impression made on one of the residents by the town of Troy, New York. A petition to the legislature followed, and the change was authorized on June 18 of that year. The community continued to be known as Troy for 30 years, till 1834, when the present title was resumed. The change from Troy back to Fall River was urged on two grounds, one that the village where most of the business was transacted was known as Fall River and the other that there was constant confusion in mail owing to the fact that there were other towns named Troy.

The first town meeting was held April 4, 1803, at the home of Louisa Borden, at which Simeon Borden, Thomas Borden and Charles Durfee were appointed a committee to settle affairs between the old town of Freetown and the new town. A second meeting was held on Aug. 15, 1803, when it was voted that the poor of the town should be put up at auction and the contract for their support awarded to the lowest bidder. This practice continued until about 1825, though an almshouse was maintained during part of this time.

At the time Fall River began its history as a separate town it had but about 1,000 inhabitants, and the village itself only about 100. The census of 1810 gave Troy a population

of but 1296, while within a section a mile and a half square there were only some 30 dwelling houses, three saw mills, four grist mills, a fulling mill, a blacksmith shop and some small stores. At the southwesterly corner of South Main and Broadway, now Anawan, street was a schoolhouse, and on the line dividing the states, a short distance north of Columbia street, was an old, unplastered meeting house, occupied occasionally and called the Line Meeting House. The regular place of worship was at the Narrows, where a Baptist church had been erected about 1800. The entire valuation of the town was less than $500,000, and the total tax, in 1813, only $1500.

The first town house was erected in 1804-05, probably at the corner of Main and Wilson roads, and this continued to be the meeting place despite attempts to have it moved till it was destroyed by fire some 20 years later. A post office was established in 1811, but removed to Steep Brook, two years later, and re-established at Troy, now Fall River in 1816.

The custom house for the section was then at Dighton, where it had been established at the beginning of the federal government, and Fall River remained a part of the district of Dighton till April 1, 1837, when the office was removed to Fall River, which was made the port of entry in place of Dighton, and the name of the district changed to Fall River.

There was no regular communication with Providence, but vessels plying between Providence and Taunton called here to take and leave freight. Stage lines to Providence, Newport and New Bedford were established in 1825. A line was also run from Newport to Boston, which made deliveries here.

During the war of 1812 the town purchased a supply of guns and ammunition, but these appear never to have been used, and were subsequently ordered sold.

In 1811 Col. Joseph Durfee had built the first cotton mill in this section at Globe Village, then a part of Tiverton, but this industry was small, and though it marked the real beginning of cotton manufacturing here, it was not until two years later that mills were erected on the stream in what is now the

center of the city. These were the Troy Cotton & Woolen Manufactory and the Fall River Manufactory, with capitals of $50,000 and $40,000, respectively, both started in 1813. They gave a considerable impetus to the community and the census of 1820 showed a population of 1594.

In the ten years between 1820 and 1830 the town experienced a boom. The Fall River Iron Works, now a great cotton manufacturing plant, began operations in 1821, for the manufacture of hoop and bar iron and nails, with a capital of $24,000. The Pocasset Mfg. Co. was started by New Bedford capitalists about the same time, Robeson's print works, and the satinet mill, about 1824, and the Annawan in 1825. .The Pocasset erected a new mill in 1826, and in 1827 the small mill at the west side of its main plant and still run by the company, known first as the Massasoit and afterward as the Watuppa. When built it was so great a wonder that people came from far and near to see it, for its size was remarkable in mill construction. It was so large that it was felt no one concern would want to use it all, and having two wheel pits, it was divided into sections to let to various persons. The Fall River Manufactory at this time also built its "Nankeen Mill," operated by Azariah and Jarvis Shove in making nankeen cloth. It was torn down when the corporation built a new mill, known as the "white mill" in 1839. Oliver Chace's thread mill, now the Conanicut, began operations in 1835.

The Fall River Bank was opened in 1825, the Fall River Savings Bank in 1828 and the Fall River Union Bank in 1830.

The North Burial Ground was bought in 1825. The undertaking business was then insufficient to make it profitable for any man to keep a hearse, but the town maintained one for free public use, in the "hearse house," standing until a few years ago on the west side of North Main street, a short distance north of Brownell street.

The Monitor newspaper began publication as a weekly in 1826, with its first issue appearing from an office on Bedford street near Main.

The first steps toward a fire department were taken the following year, when ten fire wards, or wardens, were appointed, and in 1829 an engine was purchased and a house

erected for it. This supplemented a "bucket engine" which had been secured in 1818.

The churches had now become more numerous, and some of the older structures still standing were erected between 1825 and 1850. Of these, the First Congregational, at the corner of North Main and Elm streets, was completed in 1832, the First Christian, on Franklin street, burned in 1843, had been built in 1830 and the Unitarian, which originally stood at the corner of Second and Borden streets, in 1835. A Methodist church had been formed here in 1827 and had erected an edifice south of Central street, and the Church of the Ascension, the beginning of the Protestant Episcopal work here, had been organized in 1836. The Friends Meeting House erected in 1821 on North Main street was moved and a larger one took its place in 1836. The Baptist Temple dates from 1840 and the First M. E. Church location on South Main street from 1844. The first Roman Catholic service is believed to have been held in Fall River in 1829, and in 1836 a wooden chapel, called St. John's, was erected where St. Mary's cathedral now stands.

In 1841 the selectmen were instructed at Town meeting to employ some one "to take charge of the clock of the Stone church and keep it running," and this has been done by the town and city up to the present day.

In the decade beginning with 1831 the town continued to move forward and increased its population more than 60 per cent., from 4,159 in 1830 to 6,738 in 1840. The American Print Works began operation in January, 1835, with four printing machines, and enlarged five years later. The machine method of producing calico, a few years after, wholly superseded block, or hand, printing. At first only two or three colors were applied by machinery, but mechanical ingenuity soon succeeded in multiplying them to such an extent and applying them with so much precision that manual printing became obsolete.

New streets were called for and provided. Pocasset and Pleasant were opened in 1830, while in 1832, those laid out, extended or accepted included Cherry, formerly known as Tasker, Broadway, later called Annawan, Spring, Washington and Union. In 1835 many others were laid out, and Rock,

which had been known as Exchange street, was given its present title. The first public drain in the village, at the "Four Corners," was begun in 1831, and in 1835 the poor farm property, including what is now the North Park, was purchased. The "Four Corners" was the junction of North and South Main, Central and Bedford streets. Here was the "cleft rock" at the northeast corner, the place of evening gatherings of the villagers to discuss public and other questions.

South of Central street was the "Creek," extending from the present easterly end of what was formerly known as the Metacomet Mill, westerly nearly to present Water St. The width of this creek varied from 150 to 400 feet, the wider portion being at the easterly end, where, near the shore, stood a grist mill and saw mill.

This creek was navigable, and the Providence packet came to the doors of the mills to receive and deliver freight. On the northerly side was a landing from which large quantities of wood were taken, it being consigned to Newport and other nearby points.

From the landing to the top of the bank, a short distance south of Central street, was a wood slide having a bottom of oak plank, with sides about 18 inches in height. Wood drawn in from the outlying districts and thrown into this slide soon found its way to the landing below, where it was easily loaded into vessels.

A wood lot was considered as good as a bank account, there being quite a demand for wood, and any person in need of cash could, provided he had the wood, load his team, drive "to town," and convert it into cash without difficulty.

At the westerly end of the creek, there were floating in the water a large number of pine logs of various lengths from which pumps were to be made as called for. The only method of obtaining water for domestic purposes was by use of wells or pumps, and there was a steady, though not great demand for pumps. Two, or more, were installed in each sailing vessel. The object of keeping the logs in the water was to prevent cracking, as would have been the case had they been exposed to the sun's rays. It was somewhat of a feat to bore one of these logs and get the opening straight, and in the

center of the log. The "Block Shop" on the easterly side of Water street, a short distance south of Central street where these pumps were made, was in existence as late as 1870.

In excavating for a foundation for the stone arch to carry Central street across the outlet of the creek, constructed in connection with the work of abolishing grade crossings in 1903, large quantities of sawdust and numerous large logs were found buried under several feet of mud. In excavating for foundations for the No. 7 Mill of the Fall River Iron Works Co., oak logs and sawdust were found ten to twenty feet below the surface of the old pond which was west of the Annawan Mill. This, without doubt, also came from the saw mill near the foot of the river. In the early days there were several "wash wheels" on the south side of the stream, owned and operated by the Troy, Pocasset and Annawan companies, where for a small sum the women of the community might have their clothes washed in the river. The wheels were some eight or nine feet in diameter, provided with boxes having slats, in which the clothes were placed. They continued to be used till about 1847.

A town house had been erected on a part of the North Burial Ground soon after its purchase, to take the place of the building at Steep Brook, which had been burned. In 1836 this was removed to Central street and continued to be used for the meetings of voters till the erection of the new town hall on the site of the present city hall in 1844.

The skeleton in armor, celebrated by Longfellow, and since commemorated by a bronze tablet erected near by, was discovered in 1832, in a sand or gravel bank near Hartwell and Fifth streets. It was near the surface, in a sitting posture, and quite perfect. On it was a triangular plate of brass, and about the waist a belt of brass tubes, each four or five inches long, about the size of a pipe stem and placed close together. Arrow heads and parts of other skeletons were found near by, and the skeleton was supposed to have been that of some Indian, probably a chief. It was removed to the rooms of the Fall River Athenaeum, and was destroyed in the fire of 1843.

That fire, still spoken of by the older citizens as "the great fire," was a serious matter for the town. It occurred on Sun-

day, July 2, 1843, starting about 4 o'clock in the afternoon, in a pile of shavings, from the premature celebration of the Fourth by small boys. It began near the corner of Main and Borden streets in the rear of a large three-story warehouse, and almost instantly spread to the neighboring buildings. A high southwest wind fanned the flames and carried the sparks. No rain had fallen for weeks, and the buildings were very dry. As a consequence the structures on both sides of Main street were soon on fire, and the whole space between Main, Franklin, Rock and Borden streets was burned over. A change in the direction of the wind from southwest to north, thus driving the fire back over the burned district, was probably all that prevented the destruction of nearly the entire village. The water in the stream had been drawn off to allow repairs in some of the mills, and the only means of fighting the flames were hand engines and bucket brigades. About ten o'clock in the evening, a vessel arrived from Bristol, with a hand engine, which assisted in saving houses on Purchase street.

Nearly 200 buildings were destroyed, including 95 dwellings, the "Old Bridge Mill," the Methodist and Christian churches, the Annawan schoolhouse, the postoffice and custom house and two hotels. The loss was estimated at $526,000, about one-third of which was covered by insurance. A relief committee was appointed, to care for those made destitute, and an appeal for help sent to other towns. Almost $51,000 was received in response, of which $13,165 came from Boston, while Providence and New Bedford each sent about $1700. New York also sent funds.

The town recovered quickly from the fire that at first seemed a calamity, and the new buildings erected in place of the old were substantial and, undoubtedly, a great improvement on those which had been destroyed. They included the Granite Block, and several at least, of the brick buildings now standing on North Main street between Bedford and Franklin. A new town hall, the walls of which are those of the present city hall, was constructed, and dedicated, Dec. 30, 1845. This had markets and offices on the first floor and a large hall and town offices above.

In new industries a mill known as the "Massasoit Steam Mill," because, unlike the other mills, it had no water power, being operated by steam, was erected in 1845, on the west side of Davol street, at the end of Cherry, and a mill was built by Augustus Chace and William B. Trafford in 1845, for the manufacture of cotton twine, batting and cotton warp. It was later known as the Wyoming Mills. The buildings were sold to James Marshall for the hat factory about 1896.

The years 1846 and 1847 saw the erection of two large mills, the first of that type. The earlier factories had been but two or three stories high, 40 or 50 feet wide and about 100 feet long. The Pocasset Company now constructed a mill of five stories, 219 feet in length and 75 feet wide, and the Fall River Iron Works Co. built the Metacomet mill, which it long controlled and which was likewise a tremendous plant for those times. Six years later the American Linen Co. was established, with extensive buildings, and designed, primarily, as its name implies, for the manufacture of linen goods, in which it engaged for some years. Another considerable industry had grown up at Globe Village, in the Globe Print Works, on the stream from the Cook Pond into the bay. To meet the increased business, additional banks had likewise been established, the Massasoit in 1846, the Citizens Savings in 1851, the Metacomet in 1852 and the Pocasset in 1854.

The new mills brought new inhabitants, including immigrants from Great Britain, and the population grew to 10,290 in 1845, and 11,170 in 1850. New school buildings were required and built, the Annawan having been burned and rebuilt shortly after 1843, the High street, later called the Lincoln, in 1846, the June street in 1849 and the Columbia street about 1852. An evening school was opened in 1848, a high school the following year, on Franklin street, but removed in 1852 to the building erected for its use on June street, later called the Foster Hooper. Other early schools were one of brick on the west side of North Main street, opposite where the Narragansett Mill now stands and the "Green Schoolhouse" on the north side of Franklin street, between High and Rock, erected in 1832 and later sold, and occupied on the first floor by members of the Society of Friends and on the upper floor by a private school.

A police force of six men had been appointed in 1844, and a hospital built on the town farm land in 1851, on the north side of Brownell street, about midway between North Main street and Highland avenue. Gas had been introduced in 1847, and three years later the first street lights of gas, some 20 or 30, were authorized. In 1853 the records show an appropriation of $1,000 for street sprinkling.

A regular steamer was now plying to Providence. The Hancock, of 98 tons, began trips in September, 1828, was succeeded by the King Philip, of 169 tons, in 1832, and the Bradford Durfee, of 333 tons in 1845. The Canonicus, an excursion boat, was built in 1849, and later enlarged. The Metacomet, which came here in 1854, was in 1857 purchased by the United States government and entered the navy as the gunboat Pulaski. She was finally sold at Montevideo, Uruguay, in 1863, and was plying on the LaPlatte river as late as 1870.

Before the Hancock took her place on the line there were packets running regularly between Providence and Fall River, under command of Capt. Thomas Borden, who, when the Hancock was purchased, brought her around from Boston and afterward commanded her. He was extremely unwilling to turn from anything he had undertaken, and when, in bringing the Hancock up the Seaconnet river he found she was a little too wide to pass through the draw at Stone Bridge, he is said to have hewn off with a broadaxe enough of the guards to allow her to pass, rather than go back and come up via Newport.

Steamers were also running to New York, beginning with the Eudora, a propeller, which began making schedule trips about once a week early in 1845.

What later became the Fall River Line had its beginning in 1846, when the Bay State Steamboat Co. was organized and began passenger service with two steamers, the Bay State and the Massachusetts. They were the first to approach the modern standard of Sound steamers, and served as models for those subsequently built. The Bay State was in service 17 years, and was dismantled in 1864, when her hull was converted into a barge and her engine placed in the Old Colony.

Soon after the line was opened another steamer was needed, and the Rhode Island was chartered until the Empire

State was ready. The latter, built for the service, was completed in 1848, and remained in use on the line till 1871, when she was sold and later used as an excursion boat running out of Boston. She ended her days by burning at the dock at Bristol, R. I. May 14th, 1887. Next was the State of Maine, which had been built for a line projected between Boston and Portland, but which was never employed there and was sold to the Fall River Line soon after her completion. She joined the fleet in 1850 and remained in service till 1863. The Metropolis followed in 1854, and was the finest boat of the period.

Between 1840 and 1860 a half dozen or more whale ships were fitted out here and sent on cruises, though after the discovery of gold in California most of them were used in transporting passengers and freight to the Pacific coast. The wharf where they discharged their cargoes was on Davol street, being the one occupied by Pardee & Young Co.

The Fall River railroad was opened for travel June 9, 1845. It ran to Myricks, where connection was made with trains by which one could reach Boston over the New Bedford and Taunton, the Taunton Branch and the Boston and Providence railroads. The station was just south of the Central street tunnel, but was discontinued and a new station erected on the wharf when the steamboat line to New York was opened.

FALL RIVER A CITY

Fall River became a city in 1854, adopting a seal with the motto "We'll Try." It then had a population of more than 12,000, a valuation of $8,939,215 and an annual tax of $56,000. It had school, fire and police departments, churches, mills, railroad and steamship lines, and was a thriving and vigorous town, well equipped to assume the duties of the 11th city of the commonwealth.

The change, from town to city government, appears to have been generally desired, and steps toward bringing it about were taken at a town meeting on Jan. 5, 1854, one

article of the warrant for which was, "to see what action if any the Town will take in relation to obtaining a City Charter." A committee was appointed, consisting of Foster Hooper, chairman, John Westall, N. B. Borden, Israel Buffinton, Thomas Wilbur, Robert C. Brown, Eliab Williams, Samuel L. Thaxter and Louis Lapham, to petition the legislature and draft a proposed charter. Mr. Westall declined to serve, and Benjamin Earl was appointed in his place. The Committee reported a charter and after some amendments it was submitted to the legislature. The desired act of incorporation was secured April 12, 1854, and approved by the voters of the town at a meeting on April 22 by a vote of 529 to 247.

The charter provided for the election of a mayor, the division of the city into six wards, the election of a board of aldermen of six members, one from each ward, and of a common council composed of three members from each ward. It also provided for the establishing of fire and police departments.

The first city election was held on May 6, resulting in the choice of James Buffinton, afterwards congressman, for mayor, and James Henry, Edward P. Buffinton, Oliver H. Hathaway, Alvan S. Ballard, Edwin Shaw and Julius B. Champney for aldermen. The new government was inaugurated at the city hall on May 15, with prayer, the administering of the oaths of office and addresses by Chester W. Greene, chairman of the selectmen, and the mayor.

Mayor Buffinton was re-elected in the following year, but resigned on his election to Congress, and was succeeded by Edward P. Buffinton, followed in 1857 by Nathaniel B. Borden; in 1858 and 1859 by Josiah C. Blaisdell, and in 1860 again by Edward P. Buffinton, who remained in office throughout the war, and until 1867.

One of the first important acts of the new city government was the purchase of 47 acres of land in 1855, at $200 an acre for a burial ground, and called Oak Grove Cemetery. At this time the city traded a tract of land between North Main street and present Highland avenue, on both sides of present Lincoln avenue, which the town had bought for a park in 1853.

During the summer of 1854, this city, as did many others, suffered from an outbreak of cholera, which, before it was

stamped out in October, caused the death of 130 persons. Only the most stringent quarantine regulations prevented much greater ravages of the disease.

The panic of 1857 caused much suffering, as nearly all the mills were obliged to close, and in November only two were in operation. To meet the situation, on recommendation of Mayor Borden, large numbers of men were given work by the city, at ten cents an hour, at the cemetery and poor farm and on the highways. About the close of the year, however, the New York banks resumed payment, and the stringency was relieved, allowing the resumption of work in the mills.

The following year some dissatisfaction was felt with the city charter, and an attempt was made to secure a return to the town form of government. A public meeting attended by some 400 citizens showed, however, that sentiment was about two to one in favor of continuing with the existing government, and the agitation subsided.

The annual municipal election had been held on the first Monday in March, but in 1860 this was changed to the first Monday in December and the municipal year modified so as to begin in January. The date of the election was later changed to the Tuesday after the first Monday.

In the same year, 1860, a public library was established, though deserving pupils in the public schools had since 1837 been entitled, in consideration of a payment of $800 by the town, to the use of the books of the Athenaeum, a private library organized in 1835. Most of the volumes in its collection were destroyed by the fire of 1843, but a new library had now been collected, housed first in the town hall and subsequently in the old Music hall on Franklin street. Through an agreement with the stockholders of the Athenaeum the city obtained its collection of 2,362 volumes, to which were added by gift 214 belonging to the Ocean Fire Company, and with these the library was opened for use, in the southwest corner of the second floor of the city hall building, May 1, 1861. This was but nine years after the founding, in Boston, of the first free public library in the world supported by general taxation.

A beginning of a modern fire department was made in 1859, when the first steam fire engine was purchased, and in

1860 the first permanent member of the department was engaged as its driver.

The making of flour was a considerable industry at one time, and there were three plants engaged in this business. The first of these was the Bristol County Flour Mills, erected in 1852, at the corner of Central and Davol streets, which had a capacity of 80 barrels a day. The Massasoit Flour Mills, where the Massasoit Mfg. Co. now stands, had a capacity of 200 barrels a day, and continued till the late seventies. At the foot of Central street the Fall River Flour Mills were started in 1861 and were smaller than either of the others.

A most important step in the development of the city's industries was made in 1859, in the organization of the Union Mill Co. the first corporation whose capital was secured by public subscription. Before this time the manufacturing corporations had been in the hands of comparatively few interests, but now, funds were secured aggregating $175,000, in shares of $1,000 each, and a mill of 15,000 spindles was erected. Its success brought about the starting of many other new mills, the Granite in 1863, the Robeson, Tecumseh and Durfee in 1866, the Merchants and Davol in 1867, the Mechanics in 1868 and many others within the next decade, among them, the first fine goods mill, the King Philip, in 1871.

The news of the firing on Fort Sumter aroused a storm of patriotic feeling. At a crowded public meeting in city hall on April 19, 1861, the day the Massachusetts troops were attacked in the streets of Baltimore, speeches were made by many prominent men of the city and resolutions adopted by acclamation, declaring that the government of the Union must be sustained and calling on the city to appropriate $10,000 for the aid of those who might volunteer and for the support of their families, and to pay each volunteer $20 a month in addition to what the government offered. Five days later the city council appropriated the $10,000 as requested, and voted to pay $15 each month for every volunteer.

The city was the third in the list of applicants to Governor Andrew for permission to raise military companies. Enlistments had already begun under Lieutenant Cushing, who had seen service in the Mexican war, while Chester W. Greene

organized a rifle company. These were companies A and B of the Seventh Regiment and were mustered in on June 11. A third company was also formed, but it was decided not to muster this in, and it was disbanded.

In addition to the first two companies of the Seventh regiment, the city furnished Company G of the 26th, mustered in Oct. 18, 1861, which served three years, Companies C and D of the 3rd and a large part of F and G of the 58th, which left for the front the last of April, 1864. It also contributed many men to other regiments and 497 to the navy. In all 1,770 men went to the front, including 820 for three years, 207 for nine months, 192 for three months and 37 for one year. The total appropriations by the city government on account of the war were $107,828, and $127,510 were expended in the aid of soldiers' families. The troops on their return from the field, either on furlough or at the expiration of duty, were greeted with parades, the decoration of buildings and public exercises, and on occasions when the few Southern sympathizers dared express their feelings, they promptly received treatment that showed the attitude of the citizens in no uncertain manner.

The news of the fall of Richmond was announced by the general ringing of bells, and when it became known that Lee had surrendered, the bells were again rung, cannon fired, the Light Infantry paraded, schools dismissed and work generally suspended. A large meeting was held in the city hall in the evening, presided over by the mayor.

During the war a final settlement was reached of the vexed question of the state boundary line, which had been a subject of controversy for many years. The matter had been carried to the supreme court of the United States, and in 1861 a decision was obtained which went into effect in March of the following year, by which the line was moved from a point a short distance north of Columbia street to its present location.

The old line, which ran from near the corner of William and Bay streets easterly through the old buttonwood tree that long stood on the east side of South Main street, a short distance north of Columbia had been established in 1741 by a royal commission.

The change annexed to the city, the town of Fall River, Rhode Island, which by its request had been set apart from Tiverton by the Rhode Island legislature Oct. 6, 1856. This had an area of about nine square miles, a population of 3,593 and a valuation of $1,948,378. The town had been closely allied with the city, and the merger was of the greatest advantage to both.

The war period also saw a great improvement in the railroad facilities of the city, through the extension of the existing road to Newport in 1863 and the construction of a line to Providence two years later. The first passenger train to Stone Bridge was run on Nov. 19, 1863, and the first to Newport on the 26th of the same month. The railroad from Warren to South Somerset, where connection was made with a ferryboat to this city, had been begun in the same year, but scarcity of labor, high cost of materials and severe weather combined to cause delay, and it was not until May 22, 1865, that the first train was run over this line. Connection was made with a ferryboat landing at the foot of Ferry street.

Two toll roads within the city limits were discontinued about this time. One of these was, what is now Pleasant street, east of Quarry, near which a toll house and gate stood. This road which had been built in 1827, started from Twelfth street, and continued into Westport. It was called the Watuppa Turnpike, and was owned by a stock company, known as the Fall River and Watuppa Turnpike Corporation, which was reimbursed when the toll road was made a public thoroughfare by the county commissioners in 1865. Previous to that time the Old Bedford Road, now County street was available as a public highway for those who did not wish to pay toll, but it was not kept in good repair.

The second toll road ran from the corner of Chace and Bay streets, where the gate was situated, nearly to Stone Bridge. So much of it as was within the city limits, was opened to the public by the aldermen in 1863.

Soon after the close of the war, the first large numbers of French Canadians, who have since become so considerable an element in the population, began to come here. The city's industries were prosperous, the demand for labor was keen,

and the early-comers, who soon found employment, sent for others, resulting in a large immigration.

Meantime, to meet the needs of the growing community, progress had been made in various directions. The Wamsutta Bank, afterwards the Second National, had been started in 1856, and in 1864 the First National. A third savings bank, the Fall River Five Cents Savings, was opened in 1856 and the Union Savings followed in 1869. The free delivery of mail had also been put into effect in 1863, and the first superintendent of schools in the city elected in 1865.

The churches had been active, and between 1850 and 1860 the edifices now occupied by the First Baptist, the United Presbyterian, St. Paul's Methodist Episcopal and St. Mary's Roman Catholic, had been added to the city's notable structures.

Mayor Buffinton had been succeeded in 1867 by George O. Fairbanks, who served two years, and in 1869 by Samuel M. Brown, who remained in office until 1872. Especially notable in Mayor Fairbanks' administration was the erection of the Morgan street school, now known as the N. B. Borden, the first large school building and the first to be constructed of other material than wood, the purchase of the South Park and the laying out and working of Highland road.

From a population of about 12,000 at the time it became a city, Fall River had advanced to 17,525 by the end of the Civil War. In the five years that followed, it added nearly 10,000 inhabitants, and the census of 1870 showed a population of 27,191. The valuation in that period grew from $12,000,000 to $26,000,000, and the number of spindles in operation from 265,328 to 544,606. It had made great strides, but even greater were to follow.

1871-1890

The period of 1871 and 1872 will long be recalled as remarkable for the wonderfully rapid increase in the city's industries and corresponding growth in wealth and population. Fifteen new corporations were formed and began the

erection of large mills, eleven of which were constructed in a single year, 1872. From this period date the Stafford, Weetamoe, Slade, Richard Borden, Wampanoag, Narragansett, King Philip, Crescent, Osborn, Chace, Montaup, Flint, Border City, Sagamore, Shove and Barnard, as well as the Fall River Bleachery. The mills built in the previous decade had prospered, confidence was strong and capital easy to secure.

Land values doubled and trebled, carpenters and masons were everywhere in demand and the city grew as it had never grown before. Nearly nine million dollars were added to its taxable valuation in a single year. The new factories gave employment to 6,000 additional hands, and newcomers with their families poured in from every side. In the four years between 1870 and 1874 more than 15,000 inhabitants were added to the city, increasing the population to 43,289.

It was at this period that the very rapid growth of the eastern section of the city, popularly known as Flint Village, began. It had until this time been sparsely settled farming land, but the first mills were so quickly followed by others, that a considerable community speedily grew up, and the vacant land was soon covered with buildings. To-day a territory, that in 1870 was almost entirely given up to agriculture, is covered with what is in itself a small city.

The northern section called Border City, and the southern section embracing Globe Village also began their rapid development at this time, for mills were built there as well as at the east end. The growth of the Stafford Road and Maplewood districts is more recent.

Better highways, schools and fire protection were required and furnished. In the closing years of Mayor Brown's administration, and in that of Robert T. Davis, who was the chief executive of the city in 1873, important highway improvements were made, including the widening of North Main, South Main and Pleasant streets.

Three large schools were ordered, the Slade, Davis and Davenport, two of which were begun, and work started on three fire and police stations at the north, east and south ends of the city. In the public schools, in 1874, text books were made free to the pupils.

Still other municipal work at this time was the laying out of the South Park in 1871 and the rebuilding of the city hall, to meet the demand for additional offices. A mansard roof, tower and clock were added at a total cost of $200,000.

Even more important was the construction of the water works system. This had been urged for years, but it was not until 1870 after an analysis of the water in the wells had shown a dangerous condition, while that in the North Watuppa when analyzed proved to be unusually pure, that the first steps were taken toward the construction of a system. Forty-eight acres of land at the head of Bedford street were purchased, and an engineer engaged to prepare plans. In March, 1871, the legislature authorized the project, and it was approved by the voters at an election on April 10, at which 933 voted in favor of it and only 89 against.

The first board of water commissioners, Philip D. Borden, William Lindsey and Joseph A. Bowen, was elected the following spring and in the fall, work was begun on the construction of a road, nearly a mile and a half long, which it was necessary to build to the site selected for a pumping station. The foundations for the buildings were built in 1872 and the superstructure was completed the next year. These included a granite tower for standpipes, 121 feet high, the balcony of which, situated 72 feet above the base, is 324 feet above sea level. The laying of mains had meantime been in progress, and by September, 1876, 45 miles of pipe from 6 to 24 inches in diameter, had been installed. An engine had been put in, in 1873 and pumped the first water through the mains in December of that year, though it was not until Jan. 8, 1874, that it was available for public use. A second pump was added in 1875. The cost of the water system to Oct. 1, 1876, was $1,328,456.

With a water works system in operation, the city now turned its attention to the building of sewers, and in the administration of James F. Davenport, who was mayor from 1874 to 1877, large sums were expended on this work. Following substantially the plans which had been prepared by Phinehas Ball in 1873, a total of 9,329 feet were constructed in 1874 at a cost of more than $70,000. Practically $100,000

was used in 1876, when more than four miles of sewers were built.

Other notable city work at this period included the erection of the large Davenport school, and the construction of a fire station on Plymouth avenue and a new city hospital.

The new Central Congregational Church and the Church of the Ascension were erected in 1875 and the former dedicated at this time. The Borden Block, containing the Academy of Music, was opened on Jan. 6, 1876. The railroad between this city and New Bedford had likewise been completed, and the first passenger train run over it on Dec. 16, 1875.

It was at this period, too, that Slade's Ferry bridge was built, doing away with the old ferryboat system and furnishing much more convenient communication between the city and the towns on the west side of the Taunton river, as well as the running of Providence trains directly to the city. This bridge, which was opened to the public on Jan. 4, 1876, had been authorized by the legislature in 1872 and was begun in October two years later. It was completed except for the approaches on Nov. 9, 1875. It is 955 feet long and 20 feet wide and cost $305,000, of which the county paid $41,361, the city $26,000, Somerset $5,200, Swansea $3,200 and the Old Colony Railroad Company the remainder. During its construction five men were killed by the bursting of an air chamber, Dec. 4, 1874. The first train was run across it Dec. 6, 1875.

Prior to the erection of the bridge, a ferry had long been maintained here by members of the Slade family, established by William Slade, soon after he settled in Somerset in 1689. Rowboats were used at first, then sailboats and later, beginning in 1826, a boat propelled by horses, on which the stages could cross. The steamer Faith succeeded the horseboat in 1847, followed by the Weetamoe in 1859, and was used till the bridge was opened to travel. The fare was established by the county commissioners.

In 1863, following the extension of the Old Colony Railroad to Newport, the Bay State Steamboat Co., which established the Fall River Line, transferred its steamboats to the Boston, Newport & New York Steamboat Co. and withdrew

from business. The new line established its terminal at Newport, and in 1865 added two new steamers, the Newport and the Old Colony, to its fleet.

The steamers Bristol and Providence, contracted for by a line from New York to Groton which failed, were completed in 1867, and in 1868 and 1869 they were run between New York and Bristol by the Narragansett Steamship Co., in which "Jim" Fiske was active. They were so far in advance of previous models that they were looked on as marvels, and their fame was world-wide. Each boat had a band, and the officers and crew wore uniforms, innovations which helped to make the line famous. In 1869 the company which had acquired the Fall River Line succumbed to its Bristol rival, and the steamboats Bay State, Empire State, Metropolis, Newport and Old Colony were added to the fleet of the Narragansett Co., which soon after removed its terminus from Bristol to Fall River, discontinuing the line between Newport and New York. This was in 1869, and this port has since remained the eastern terminus. In 1874 the line was acquired by the Old Colony Steamboat Co., a corporation organized by the interests that controlled the Old Colony Railroad Co.

The steamer Pilgrim, the first steamboat on Long Island Sound to be built of iron, took her place on the line in June, 1883, the Puritan in 1889, the Plymouth in 1890, the Priscilla in 1894, the Providence, the second of that name, in 1905 and the Commonwealth in 1908. The Plymouth was burned at her dock in Newport in 1906, while undergoing repairs, but was rebuilt and placed in service again the following year. Such magnificent boats as these have made the Fall River Line famous the world over.

Since 1894 the line has been controlled by the New York, New Haven & Hartford Railroad Co.

In 1874 the steamer Richard Borden of 785 tons was placed on the Providence Line. The narrowness of the Providence river made it very difficult for boats to turn and this boat was constructed as a "double ender," that is, to run in either direction much the same as a ferry boat; she was unusually fast, accommodated a large number of passengers and became very popular. After many years she was sold to

the Joy Line and re-named The Fairfield. She then ran from New York on the Bridgeport Line and was dismantled in 1910.

In 1888 the Mount Hope of 880 tons, built in Boston, was placed on the line to run to Block Island. This boat was both swift and staunch and still makes regular trips in the summer between Providence and Block Island, calling at Newport.

Soon after 1900 the passenger service which had been maintained between Providence and Fall River since 1828 was discontinued. Freight boats were run until 1905 when the company withdrew from the service.

The line was run as a part of the Fall River Iron Works Company from its inception in 1828 until 1880, when it was incorporated as the Fall River & Providence Steamboat Company. In 1896 it was sold to the Providence, Fall River & Newport Steamboat Company which continues business, although it has withdrawn from this port, finding it unprofitable to compete with the electric railroads between this city and Providence.

A freight line is now in existence under the name of the Dyer Transportation Co., while the freight steamers of the Merchants & Miners Transportation Co. make this city a port of call for the Philadelphia-Providence steamers.

The federal government recognizing the growing importance of the city, authorized the erection of the handsome postoffice and custom house on Bedford street. This was begun in 1875 and completed in 1880, at a total cost of $518,000, of which $132,000 was for land.

The first session of the superior court was held here on June 27, 1877, in a large room in the new Borden Block, where sittings continued to be held till the North Main street court house was ready for use. Until 1877, sessions were held in this county only in Taunton and New Bedford.

A further addition to the steamship facilities of the port had been made in 1876, when the Clyde Line made this the terminus for its Philadelphia steamers.

The city had suffered in the panic of 1873 and in "The Great Vacation" of 1875, when the mills were closed for nine weeks during the summer, but these were mild in comparison with the losses caused through financial irregularities

in certain corporations that came to light in 1878 and 1879. These caused the reorganization of several of the mills and severe losses to many individuals. Savings banks were restrained from paying more than ten per cent. of deposits within six months. Dividends were suspended for a time, and depositors sold their books for as low as 70 cents on the dollar. The blow was a hard one to the community, but it kept its courage and went to work with an energy that again won success.

The Granite Mill fire which occurred on the morning of September 19, 1874, and cost the lives of 20 workers and the injury of 30 more, will long be remembered. It taught the need of improved methods of escape in other mills, and they were installed at once.

Crawford E. Lindsey was mayor in 1879 and 1880, and in his administration sewer and highway work were again pushed forward, and a board of health established, with B. F. Winslow, J. S. Anthony and C.W. Copeland as members. The city stables were removed from the building now occupied by the police department as a central station, and the building remodelled so as to give the police, who had occupied only part of the structure, the entire building with the exception of that occupied by the second district court on the second floor.

The last half of the decade from 1870 to 1880 saw a comparative lull in mill building, and though existing plants were somewhat extended, the total spindles added during this period numbered about 120,000. The population, too, was growing much more slowly, and from 45,160 in 1875 had reached but 47,883 in 1880. The city, however, was gaining strength for another great advance in the coming ten years, and was putting on more and more the aspect of a modern municipality.

It already had the beginning of a telephone system, installed in the late 70s, and in 1880 the first street cars were put in use, drawn, of course, by horses, and running first on Main and Pleasant streets, though in the beginning for only a part of the present distance of the lines. Three years later, in 1883, electricity was introduced in the city and began to compete with gas for the illuminating field.

The Troy Co-operative Bank, the first of the four institutions of this nature which now hold large sums collected through the savings of the citizens, was established in 1880, followed by the People's in 1882, and the Fall River in 1888. New homes were needed by the First National Bank, the Fall River National, the Massasoit and the Metacomet, and suitable buildings were erected between 1887 and 1892.

The industries of the city after 1880, began to move forward, and, beginning in 1881, the city saw the formation before the end of the decade, of the Globe Yarn, which erected three mills, the Laurel Lake, the Barnaby, for the manufacture of ginghams, the Seaconnet, the Hargraves and the Kerr Thread. It also saw the erection of new mills by the Durfee, Sagamore, Richard Borden, Border City, Tecumseh, and Stafford corporations and the construction of the first of the seven large mills of the Fall River Iron Works Co., a corporation which years before had carried on a large iron business here, and which has been maintained under its old name, to preserve valuable rights given by its charter, though now engaged in cotton manufacturing.

Across the Rhode Island line in Tiverton but so near that Fall River benefitted largely from them, were built the plant of the Bourne Mills, and a second mill of the Shove. Approximately 800,000 spindles were added at this time bringing the total well above the two million mark.

In the latter part of the decade, too, in 1887, a small beginning had been made toward what is now the large hat manufacturing establishment of the Marshall Brothers.

The magnificent high school building given by Mrs. Mary B. Young in memory of her son, Bradford Matthew Chaloner Durfee, was begun in 1883 and completed on June 15, 1887, when it was with due ceremonies presented to the city, accompanied with an endowment of $50,000. Of beautiful proportions and placed on a commanding location, it was a splendid addition to the city from an architectural as well as an educational point of view. It has a total length of 253 feet, a greatest width of 90 feet, with two towers, one bearing a clock and chimes and the other a telescope.

The record of the city government during the decade shows a quiet but steady forward movement. William S. Greene was mayor in 1880 and was re-elected in 1881, but resigned to become postmaster and was succeeded by Robert Henry. The office of city engineer was established. The Linden and Cambridge street schools were erected and the city stables begun.

In 1882 and 1883, Henry K. Braley, now a justice of the supreme judicial court of Massachusetts, was the chief executive. In his term, electric street lighting was introduced, and the North Park dedicated to park purposes.

Milton Reed succeeded Mr. Braley in 1884. Additional electric street lights were erected and three four-room school buildings erected, the Covel Street, the Mt. Hope Avenue and the Brownell Street.

John W. Cummings, mayor in 1885, was succeeded in 1886 by William S. Greene, and returned to office in 1887 and 1888. The burning of the interior and roof of city hall, March 19, 1886, leaving only the walls, and its rebuilding at a cost of $300,000; the widening of South Main street from Pocasset to Anawan, to a width of 60 feet, and the dedication of the new high school are the facts that stand out most prominently in the record of these years.

1890-1911

In the 20 years since 1890 Fall River has continued to make wonderful progress. It has added more than 45,000 inhabitants, increasing the number from 74,918 to 119,295 by the federal census of 1910, a gain of practically 60 per cent. The assessed valuation has increased from $53,473,183 to $92,488,520, a gain of 73 per cent. The city has come but little short of doubling the number of spindles in its mills.

It has extended and greatly improved its streets, beautified its parks, protected the purity of the water supply, added playgrounds, placed wires underground, eliminated grade crossings and has seen the building of a handsome new bridge across the Taunton river.

Scores of beautiful buildings have been erected, including those of the superior and district courts, schools, the Boys' Club and its extension, the Women's Union, the Young Men's Christian Association, the Public Library, the Armory, and the churches of Notre Dame and Ste. Anne, with the latter's convent and rectory. Five new hospitals have been built, the Union, Ste. Anne's, the Highland, the City, and the Contagious, and buildings have been erected for the Children's Home, St. Vincent's orphanage, the Home for Aged People and the Bishop Stang Day Nursery. Many modern business blocks have been constructed, including those of the Massasoit-Pocasset and Metacomet National Banks, the Bennett building, the Daily Globe building and the large department stores on South Main street.

Fall River has seen times of depression, but to-day is bigger, better and stronger than ever before.

Four new manufacturing corporations were formed here in the early 90s, the Algonquin Printing Co., the Sanford Spinning Co., the Stevens Mfg. Co., and the Parker Mills, and all erected large plants. The Fall River Iron Works Co. erected mills Nos. 2, 3 and 4, the Hargraves a No. 2, the Chace a No. 2, the Tecumseh a No. 3, the Granite a No. 3, and the Union a No. 4, while the King Philip put up a large weave shed and the Seaconnet materially increased its capacity.

The Arkwright was incorporated in 1897, and about this time the Laurel Lake extended its plant, the Globe Yarn enlarged and the Barnard and the Shove constructed weave sheds that are small mills in themselves.

Since 1900 the Iron Works Co. has built two mills, the Davis two, the Flint, the Sagamore and the Stevens one each. The Lincoln Mfg. Co. incorporated in 1906, has begun operations. The Algonquin Printing Co. has erected its largest building. The Barnard, the Narragansett, the Weetamoe, and the Stafford have extended their plants, and the factories of the Charlton Mills, the Pilgrim Mills, and the Standard Fabric Co. have been begun.

During the first four years of this period, ending with 1894, Dr. John W. Coughlin was mayor and much was done

to meet the needs of the growing community. The fire district ordinance was amended in his first term, and the police force was enlarged and reorganized. In 1893, the Davol and Osborn schools were completed. The new city hospital was opened, July 1, 1894, and a city dispensary established, in that year.

An important change at this time was in the motive power of the street cars, which were equipped with electricity in the summer of 1892. The first car was run on Aug. 17, from the Stafford road car house to Morgan street, and on Sept. 2 the first electric car ran through the center of the city. About this period also an independent electric road, called the Fall River Street Railway, had been built from the corner of North Main and Bank streets to the Highlands, which was absorbed by the Globe Street Railway Company in April, 1894. The Dartmouth & Westport Street Railway to New Bedford, was built in the latter year and opened July 1. It has now been acquired by the Union Street Railway Co. of New Bedford.

Other suburban roads have followed. The Dighton, Somerset & Swansea was built in 1895, but did not give direct service into the city till May 5, 1903, the Newport road in 1898, and the Providence line in 1901. Electric express service was begun to New Bedford in 1903 and to Providence in 1905, and later to Taunton and Brockton, and a substantial freight house built on Bedford street in 1910. Electric street sprinkling dates from 1905.

The steam road between this city and Providence was equipped with electricity in 1900. The first passenger car operated between the two cities by the new motive power was run Nov. 27, 1900, and regular operations began Dec. 2.

During the administration of William S. Greene, who had been again elected mayor in 1895 and held office till 1898, the city began the erection of its present public library building, which was authorized in 1895 and begun in May of the following year and which stands on the site of the homestead of the late Mrs. Mary B. Young. The cornerstone was laid Sept. 30, 1896, and the structure, which, with land, curbing, grading and furniture, had cost $252,000, was opened to the public in March, 1899. The library had for 13 years, after

the burning of city hall, been occupying leased quarters. It was for a time in Flint's Exchange on South Main street and later in the skating rink on Danforth street, but from January, 1887, it occupied till the new building was completed a large hall in the upper part of the Brown building, at the corner of North Main and Pine streets.

In 1895 a reservoir commission was appointed, whose duty was to protect the purity of the city's water supply. The Coughlin and William Connell schools were erected and a new police building constructed on the north side of Granite street.

Amos M. Jackson was mayor in 1898 and 1899 and John H. Abbott in 1900 and 1901.

The superior court house had been authorized as early as 1887. The site selected on North Main street had been the birthplace of Col. Joseph Durfee, the homestead of Micah H. Ruggles and later the residence of Col. Richard Borden. The cornerstone was laid with Masonic ceremonies on August 8, 1889, and the building completed in the early nineties, at a cost of $225,000.

Another notable building constructed before 1900 was the state armory, on Durfee street, between Elm and Bank, for which the city on January 3, 1895, authorized the expenditure of $100,000, which sum was subsequently increased to $150,000. Bonds were issued by the state, eventually to be met by a sinking fund toward which the city each year paid a special tax. The building was completed in 1897, and contains quarters for six companies, and a drill hall 150 feet by 75. The State has since taken possession of it.

During the war with Spain, Battery M, of the First Regiment, and members of the Naval Brigade were employed in the service of the United States. The call for the assembling of the battery was issued on April 25, 1898, the day war was declared, and within an hour the men were assembled, armed and equipped. Early the next day they proceeded to Fort Warren, in Boston harbor, where, on May 9, they were mustered into the United States service, for two years, being a part of the first volunteer regiment in the country to be mustered in. The Battery served at Fort

Warren until September 19, when it was sent to South Framingham. A furlough was granted October 5 and duty ended November 14.

Company F, Naval Brigade, saw service on the cruiser Prairie, the monitor Lehigh and, on occasions when the men were on detached duty, on other vessels. The Signal Corps was also called out. Company I, Naval Brigade, was formed May 25, 1898, as a reserve company.

The present railroad station on North Main street was completed in 1892. The county jail, noted for never having held a prisoner, at least under a sentence of the court, was erected in 1898, under a legislative act of the previous year, and cost, when furnished, $150,000. It has 126 cells, and was believed to be needed when it was authorized. The growth of the probation system since that time, however, has been such that it has never been used.

One change, far-reaching in its effect, which had taken place during this period and of which no mention has been made, was in the control of the police department and the liquor licenses, which took place in 1894. Citizens who appeared before the legislature secured the passage of an act, approved May 7, by which the administration of the police department and the granting and supervision of licenses for the sale of intoxicating liquors were taken from the board of aldermen and placed in the hands of a commission of three legal voters of the city appointed by the governor. Attempts at various times to abolish the commission have failed.

The decade closed with a population in excess of 100,000. In spite of business depressions the city had grown till it numbered 104,863, an increase of 40 per cent., while the valuation had advanced more than $20,000,000. Almost 900,000 spindles had been added, and the aggregate was 3,042,472.

The abolition of the grade crossings on the main line of the Old Colony railroad and on the Providence branch within the city limits, was one of the most important improvements in the early years of the new century. The work began June 28, 1902, and was completed June 16, 1905 on the opening of the viaduct connecting Central and Anawan streets and the closing of the Pond street crossing.

The general plan followed, was that of depressing the streets and raising the tracks, which in some cases are now eight feet above the old level. The change also necessitated the raising of the Fall River station about eight feet. The old Central street tunnel, which had been constructed when the road was first built, was torn down and rebuilt for three tracks instead of one. Eleven crossings were abolished, two at Brownell street and one each at Davol, Lindsey, Turner, Danforth, Ferry and Pond streets, and Allen's crossing, Wilson road and Riverview Gardens. Seven railroad bridges were built, and five highway bridges, one of which, the viaduct, is 637 feet in length. It was impossible to eliminate the grade crossing at Water street.

Efforts had long been under way to secure the improvement, but quite a number of lives were sacrificed before work was authorized. It had been petitioned for by the aldermen in 1894, and the first hearing before the commissioners was in the following year. The total cost of the work was $1,580,051.16, of which the railroad paid 65 per cent., the state 25 and the city 10. The engineers' estimate of cost was $1,600,000. Most of the work of construction was done during the administration of George Grime, who was mayor from 1902 to 1904, inclusive.

Another important matter was the adoption in 1902 of the present city charter, to take the place of that of 1854, which a majority of the citizens felt had been outgrown. A change had been urged for 30 years, but it was not until 1901 that a representative committee of 30 citizens presented a plan which was substantially adopted. The charter proposed by this committee, after some amendments, was passed by the legislature in 1902 and accepted by the voters at the State election on Nov. 4, 1902, by a vote of 6,835 to 3,689. It went into effect at the beginning of the municipal year in January,1903, with Mr. Grime, who had just completed one year's service under the old charter, the first mayor under the new.

The new charter abolished the common council, and established a board of aldermen of 27 members, three from each of the nine wards. Two of these were to be elected by the voters of the ward, and one by the voters of the entire

city. The terms of the members were made two years, one half to be elected each year, and it was provided that the presiding officer should be elected from the board by the members. The mayor's term, as well as that of the principal heads of departments, was made two years, and he was constituted strictly an executive officer, with control over the various departments except the schools and the police. A fire commission was established with a three years' term, and the same term was given to the members of the board of health. Many of the city officials were to be nominated by the mayor and confirmed by the aldermen.

Mayor Grime in 1902 appointed the first park commission, in accordance with the overwhelming vote of the citizens in December, 1901, when by a vote of 6,563 to 1,159, they had accepted the State law authorizing such a commission. Olmsted Brothers, landscape architects, were employed to prepare plans for the improvement of the park system, and the plans submitted by them were adopted. Loans were authorized, and nearly $200,000 expended within about four years, resulting in a very decided improvement of the park lands. Ruggles park was part of a tract of 12 acres formerly belonging to the "Rodman farm" and known as Ruggles Grove, purchased in 1868. Part of the tract had been taken for the extension of Pine and Seabury streets and the Ruggles school, and the section west of Seabury street was sold. The present park, of 8½ acres, was dedicated for park purposes on June 10, 1895.

The South Park, which contains 60 acres, had been purchased in 1868, and laid out between South Main street and Broadway in 1871, but the remainder was not improved until later. The North Park, 29 acres, was formerly a part of the city farm, but was set aside for park purposes in 1883, though little was done to develop it, until after the commission began its work. Work is being carried on at the present time.

In addition to the three large parks, the commission was given control of Durfee Green, at the junction of Highland avenue and High streets, Cambridge Green, at the junction of Cambridge and Coral streets and Stafford road, Eastern avenue, and Plymouth avenue parkways and the cemeteries, and all have been made much more attractive than formerly.

Another board which did much valuable work for the city was the Reservoir Commission, established under a city ordinance passed on April 25, 1895. This Commission consisted of the mayor and city engineer ex-officio and three citizens appointed by the mayor and confirmed by the aldermen. In order to protect the purity of the water supply, the commission has acquired nearly 3,000 acres of land, on both sides of the North Watuppa pond, at a cost of more than $200,000. In view of the possible necessity of diverting some of the streams that flow into the pond, an exhaustive study was made in 1899, 1900 and 1901 of the capacity of the ponds, the amount of the discharge of the streams, the nature and extent of the watershed, evaporation, rainfall, and flow from the North into the South pond. This was done under the direction of the city engineer, with Arthur T. Safford of Lowell, consulting engineer, and in 1902 a voluminous and valuable report was made. The commission as originally constituted was abolished June 5, 1905, and its duties transferred to a new board made up of the three members of the water board and the mayor and city engineer ex-officio.

In connection with the study of the water supply by engineers in the employ of the reservoir commission, an extended examination was made of the Quequechan river and of possible methods for improving it, so as to give the mills an adequate supply of cool water from the stream for condensing, even in the dryest seasons, make available for use a large amount of land, approximately 166 acres, near the center of the city which is now flowed in times of high water, and remove unsanitary and unsightly flats which are exposed at low water. The consulting engineer presented a report on the situation late in 1910, with three plans, either of which would greatly improve conditions. He proposed either a single canal, a canal with cooling ponds, or a canal for cool water only with channels to convey the hot water from the steam plants back to the pond. The estimated cost ranged from $685,000 to $740,000 and it was suggested that the land which could be reclaimed might, in the case of the first and third plans, repay the expenditure. The proposed work extends from the Sand Bar at the head of the river to the

Watuppa Dam, near Pleasant street, and if put into effect will, in the opinion of the engineer, be "an improvement for all time, which will build up the city, provide facilities for the mills and the public, and perhaps improve the character of the city so much that it will remain a permanent monument to the people who have this matter in charge."

Surveys have been made, plans prepared and approved by the State Board of Health, and a report is now in the printer's hands showing the intention of the commission to construct along the westerly shore of the North Watuppa pond a conduit to collect the drainage now entering the pond from the west, between Pleasant street and New Boston road, and delivering it into the South Pond, where it will be available for manufacturing purposes by corporations located on South Watuppa pond and Quequechan river but cannot menace the city's water supply in the North Pond.

The strike of 1904 was the longest and the most disastrous in the history of the community. Nearly 30,000 operatives were idle the greater part of 26 weeks, from July 25 till Jan. 21 of the following year, causing an estimated loss of $4,500,000 in wages. Work was resumed following a conference in January with Governor Douglas at the state house between representatives of the manufacturers and the operatives, at which he agreed to investigate business conditions in the industry and report a margin between cotton and cloth on which an increase in the scale of wages should be paid. On his subsequent report a system of wage dividends based on the margin between the quotations for specified quantities of cotton and cloth went into effect, and continued until July 2, 1906, when the wage scale prevailing before the strike was restored.

Approximately 7,000 persons removed from the city during the strike which, however, had been marked by uniform good order. The census in the spring of 1904 had shown a population of 113,602. That of 1905 revealed but 106,645, and it was not until 1908 that the city regained the ground it had lost.

Important changes in the local banks had taken place in 1903, following a state law which forbade national and

savings banks to occupy the same offices. In February of that year the Second National, which had rooms with the Five Cents Savings, was purchased by the Metacomet National, and in July the Pocasset National, which occupied an office with the Citizens Savings, and the National Union, which had been associated with the Union Savings, merged with the Massasoit to form a new bank know as the Massasoit-Pocasset National, which occupied the enlarged banking rooms of the old Massasoit National Bank.

In the same year, 1903, a beginning was made in the laying of granolithic sidewalks, under a betterment system, which has become very popular, and has done much to improve the appearance of the city.

The Roman Catholic diocese of Fall River was established March 12, 1904, consisting of Bristol, Barnstable and Dukes counties, with the towns of Marion and Mattapoisett, in Plymouth county. Fall River was made the episcopal city and St. Mary's church named as the pro-cathedral. Rt. Rev. William Stang, D. D., was consecrated as the first bishop, at the cathedral in Providence, May 1, 1904, and on his death February 2, 1907, was succeeded by the present bishop, Rt. Rev. Daniel F. Feehan, D. D. Fall River had been a part of the diocese of Boston until 1872, when the diocese of Providence was erected, which included this city.

The Bradford Durfee Textile School on Durfee street was opened to students on March 7, 1904, and has since proved so popular and successful that within a few years a large addition was necessary, which was erected on Elm street and connected with the original building. The school first opened with 164 pupils and during the year of 1910-1911 had 50 day students and 900 evening pupils. It is free to citizens of the commonwealth, and is supported by appropriations by both the state and the city.

The school is equipped with modern machinery and laboratories, and, in the words of the catalogue, is designed "to meet the needs of two distinct classes of students: one class being those who wish a preliminary training in the art of manufacturing before entering upon the practical work in the mill; the other being those already at work in the mill, who

feel a necessity for a training in the principles of the art and a greater knowledge of all the departments of their chosen vocation."

In 1907 the cotton manufacturing industry of the city experienced a period of prosperity, in which the whole community shared. The product of the mills sold at the highest price since 1880 and was in such demand that even at these prices it was contracted for, months ahead. The profits were large and the mills were enabled to place themselves in a strong financial position. Dividends were increased and extra payments made to shareholders. The employes shared in the general prosperity through advanced wages and steady employment. The year's business was of inestimable value to the city, not only for the financial returns but also for the increased confidence it gave in the community's chief industry.

A sliding scale of wages was agreed upon in May, 1907, which went into effect the last Monday in that month, and with modifications, remained in force for three years. It was for six months' periods, and was terminable by either party on three months' notice. It was discontinued in the last part of May, 1910, following notice by the textile unions that they desired to abrogate it and the failure of negotiations for its renewal.

The agreement was entered into in a period of great prosperity, and under it wages were advanced to a high level. The subsequent year, however, business became less profitable, and the margin between cotton and cloth, on which the scale was based, declined to such an extent that in May, 1908, wages were reduced under the agreement 17.94 per cent., to a basis of 19.66 cents per cut for weaving. The margin continued to decrease, and in November of 1908, May, 1909, and November, 1909, the manufacturers were entitled under the scale to make additional reductions, in the last instance to the minimum of 18 cents per cut. They, however, waived their rights each time and maintained the scale at the 19.66 cents level, on which wages are still based.

John T. Coughlin was mayor of the city from 1905 to 1910, inclusive, and at the beginning of the municipal year of 1911

was succeeded by the present chief executive, Thomas F. Higgins. During Mr. Coughlin's administration the Samuel Watson school was completed and occupied in September, 1906, and the new Lincoln school was completed and dedicated June 18, 1907. This replaced the old wooden building, erected in 1846, which was burned on Dec. 22, 1905. The Westall school was completed in 1908, permitting the closing of the Foster Hooper and June street buildings, and the fire station on Stanley street, at the Highlands was finished. In 1909, a new engine of 10,000,000 gallons daily capacity was installed at the pumping station. The William S. Greene school was completed and occupied in September. Three new schools were begun in 1910, the John J. McDonough on William and Fountain streets, the William J. Wiley on North Main and Canedy streets, and the Hugo A. Dubuque on Oak Grove avenue, and plans were prepared for a new technical high school on the site of the Foster Hooper and June street buildings, for which the contract was awarded in April, 1911. The hospital for contagious diseases was completed and opened for the use of tuberculous patients, and Purchase street extended to Court square, thus furnishing a new highway from the center of the city to the north. A fire station on Stafford road was completed in 1910.

The fourth of the large tanks of the water department was constructed in 1907 on the south side of Bedford street. It has a capacity of 1,389,976 gallons, and is of about the same size as the first Bedford street tank, built in 1892, and that on Haskell street, built in 1897. The Townsend hill tank, the first to be constructed, was built in 1886, and holds 1,161,448 gallons. The combined capacity of the four is 5,306,593 gallons, about one day's supply for the city.

Two large playgrounds were purchased by the park commission in 1909, under the provisions of a legislative act which had been accepted by the citizens by a decisive vote. The tract on Stafford road contained nearly 16 acres and cost $38,386.50. The land on Eastern avenue and County street, containing about 11½ acres, was bought for $42,513.91. The city also has playgrounds at the South, North and Ruggles Parks and at the corner of Canal and Spring streets.

The new bridge over the Taunton river at Brightman street, authorized by the legislature in 1903, to be constructed by a joint board consisting of the County Commission, the Harbor and Land Commission and the Railroad Commission, and begun in 1906, was opened to public travel Oct. 10, 1908, and furnished a new and attractive entrance to the city. It is 922½ feet in length, between abutments, 60 feet wide, with sidewalks eight feet in width, giving a roadway of 44 feet, and has a draw span of 118 feet. Its total cost to September, 1910, was $1,014,102.17. Of this $528,824.28 was apportioned to be paid by Fall River, $8,112.82 by Somerset, $4,056.42 by Swansea, $38,738.71 by New Bedford, $13,183.33 by Taunton, $1,216.92 by Westport, $2,636.65 by Dartmouth, $1,521.15 by Dighton and the remainder by the County of Bristol. It was further ordered that 96 per cent. of the cost of care and maintenance should be borne by Fall River, 2½ per cent. by Somerset and 1½ per cent. by Swansea.

Still another great work for which plans are being prepared and permission has been obtained from the legislature, is the building of a tunnel under the city by the New York, New Haven & Hartford Railroad Company, to connect its main tracks along the bay with its New Bedford branch. This will, if constructed, give the railroad direct communication through the city from New Bedford and the Cape to Providence and New York, thus avoiding the present circuitous route to the north.

One of the recent additions to the city's public buildings is the district court house on Rock street, erected on the site of the Exchange Hotel, later the Gunn house, which in the period between 1830 and 1850 was the principal hotel of the town. It was completed early in the present year, and the first session of the court was held there on Jan. 23, 1911.

The extent of the city's industries to-day is shown by figures recently made public by the census bureau, from an inquiry made here in 1909. The agents of the bureau reported here in that year 288 manufacturing establishments, with a capital of $82,086,000. The materials used cost $35,524,000, and the value of the product was $64,146,000, showing a value added by manufacture of $28,622,000. The average number of wage-earners employed was 37,139, and the total salaries and wages paid, $16,583,000.

THE GLOBE COTTON MILL

The cotton mill that was started at Globe Village 100 years ago by Colonel Joseph Durfee bore but little resemblance to any of the mammoth factories that have succeeded it, yet it was the beginning of the great industry which has since grown up here.

It occupied a building at what is now the northeast corner of South Main and Globe streets, which is supposed to have been the building still standing, and probably contained less than 1000 spindles. The picking of the cotton and the weaving of the cloth were still done by hand, in the homes of neighboring farmers, and the carding, spinning and finishing were probably all that were done in the pioneer mill. Its equipment is supposed to have been limited to a few Arkwright spinning frames, carders and probably a calender, and these were operated by the scant water power obtainable from the little pond adjoining.

Col. Durfee's mill, known as the Globe Mill, was a stock company, and in soliciting subscriptions for the shares, the most effective argument is said to have been that "cotton cloth would darn much easier than linen." The success of the enterprise was not great at any time, due probably to want of practical knowledge, and in the end the venture appears to have been disastrous. The mill was operated by various persons, and in 1829 the building was converted into a print works.

All honor, however, is due to Col. Durfee as a pioneer in the industry here. He was the son of Hon. Thomas Durfee, and a grandson of one of the original holders of a large tract in that section under the Pocasset Purchase. At the time of starting the mill he was 61 years of age. Eight others were associated with him in the ownership of the 100 shares in the enterprise, and their names appear in the deed given below.

This deed is interesting not only as the first reference to the mill, in the town records of Tiverton, but also from the fact that it gives the names of the other original stockholders

and the amount of their holdings, and likewise furnishes an excellent example of the wording and spelling in the deeds of those days. It is as follows:

Whereas I Joseph Durfee of Tiverton in the County of Newport Esq. am the sole owner and proprietor of a certain lot or parcel of land lying in the Town of Tiverton aforesaid and is a part of my homestid through which a stream of water flowing from a certain pond called Cooks Pond doth pass whereon it is contemplated to Erect and put in motion a cotton factory and in order to effect the same I the said Joseph have thought fit to divide the lot with the privileges and appurtenances thereunto belonging into one hundred shares and to dispose of the same in the following Manner

.....

Now Know Ye that for and in consideration of the sum of Six hundred and Sixty dollars to me in hand paid by the Persons hereafter Named in manner following to (wit) by Seth Simmons of Providence in the County of Providence carpenter four hundred and forty Dollars by Nathan Chase fifty five dollars by Boulston Brayton thirty three Dollars by William Durfee twenty two dollars all of Tiverton in the county of Newport yeoman, Benjamin Brayton of Gray twenty two Dollars by Nathan Cole Sixty Six Dollars Elisha Fuller Eleven Dollars Robert Hazard Eleven Dollars all of Rehobath in the County of Bristol and Commonwealth of Massachusetts the receipt whereof I the said Joseph do hereby acknowledge and with other considerations me thereunto moving have Granted Bargained and Sold unto the above Named persons Sixty Shares of the One Hundred Shares above mentioned (to wit) To Seth Simmons forty shears to Nathan Chase five shares to Boulston Brayton three Shares to William Durfee two shares to Benjamin Brayton two Shares to Nathan Cole Six Shares to Elijah Fuller one Share and to Robert Hazard one Share of a Certain Lot of Land above mentioned, bounded as follows takeing its beginning at the Southwest Corner of said lot and Running South thirty five degrees East twenty Rods and two Links thence South twenty five degrees west Eleven Rods and twelve Lingths thence South Sixty Seven degrees and one quarter East twenty three Rod and two Links thence North thirty four Degrees East nineteen Rods and thirteen links thence North thirty five degrees west thirty one Rod eight links thence South Seventy three and half degrees West twenty two rods agreabale to the plat by Survey hereunto anexed reference being thereunto had for further particulars

.....

To Have And To Hold the Sixty Shares aforesaid with all the

privileges and appurtenances thereunto belonging with a further and more particular privilidge (to wit) that of passing to and from the road to the head of the Stream by foot people for the purpose of opening and Shuting the Gate with privledge to Clear out the brook Springs and Streams as occation may require to them the said Seth Simmons Nathan Chase Boulston Bravton William Durfee Benjamin Brayton Nathan Cole Elisha Fuller & Robert Hazard the share above mentioned to them their heirs and assigns forever and I the said Joseph for my self heirs Executors and administrators do covenant to and with the afore Named Grantees that I am the true Sole and Lawful owner of the premises afore-discribed, and have good Right to Sell and Convey the same in manner as afore said and that I will warrant and Defend the Same against the Claims of all persons.....

In witness whereof I have together with Elizebeth wife of me the sd. Joseph our hands and Seals the Sixth day of June 1811- Signed Sealed and Ded.

in the presence of JOSEPH DURFEE (Seal)
Pardon Gray
William Humphrey ELIZBETH DURFEE (Seal)

Newport Ss at Tiverton in sd. County personally appeared the above Named Joseph Durfee and acknowledged the foregoing Instrument to be his Vaullentory act Deed hand & Seal this 7th. day of October 1811-

Before me THOS. DURFEE Jus Peace

A true Coppay of the original Deed.....
Recd. on file at Tiverton October ye 11th day A.D. 1811.....
at four o'clock P. M.

PARDON GRAY Town Clerk .....

Following the records, it appears that in 1813 Oliver Chace purchased a controlling interest in the mill, and later in the same year, conveyed it to several persons. Charles Dyer and Benjamin Dyer each purchased from Mr. Chace 25 shares, at $60 a share. Nine years later, in 1822, the Dyers conveyed their shares back to Oliver Chace. Each received $1388 for his interest, "being," as the deed states, "all right and title to the factory and other buildings, and machinery, tools and stoves belonging to the Globe Cotton Mill, standing on land aforesaid."

In 1830, for the sum of $1986, Oliver Chace sold to Cyrus Potter 71 undivided seventy-fifth parts of the Union Factory, lot, buildings, fixtures and machinery; also 22½ undivided

100th parts of the Globe Factory, lots and buildings thereon and other land. In 1832 Cyrus Potter sold to Charles Potter for $25,000 several parcels of land and buildings, including that "formerly known by the name of the Globe Mill and the Union Mill, now occupied and improved for bleaching, dyeing and printing calicoes."

The venture, as has been said, was at no time notably successful, and Col. Durfee lost a large part of his fortune in the enterprise. It was subsequently operated by various persons, and in 1821, following the burning of the Troy Mill, the agent of that corporation was authorized by his stockholders to negotiate for a five years' lease of the factory, with its real estate and machinery. It does not appear, however, that such a lease was made. About 1829 it became a part of a print works operated first by Potter & Chatburn, who printed their first goods in September, 1830, and later known as the Tiverton Print Works, and finally as the Bay State Print Works.

A part of the old mill was also for a time, between 1843 and 1850, used temporarily as a schoolhouse by one of the Tiverton districts.

It is believed that printing machines were used in the old Globe Mill as late as 1845, when they were removed, from which time the building has been used for storage purposes. The attic was probably used for hanging the cloth after printing to "age" it, preparatory for dyeing. The water wheel, although perhaps not the original, was removed about 1850.

The present building which is supposed to have been the original, measures 120 2-10 feet in length, 32 4-10 feet in width, with a projection on the west side about 31 feet by 8 feet, and having three stories and an attic. It is now owned by the New England Cotton Yarn Co. and the Laurel Lake Mills.

When the mill was started, cotton had been grown in this country for manufacture only 75 years. No factory for spinning it had been established in the United States till 1787, when a little mill operated by two horses driven by a boy, was started at Beverly, with a few jennies, each of which spun 84 threads. Spinning frames were in use in England during the Revolution, but an act of Parliament, strictly enforced, made it impossible to obtain the machines or their plans and

also forbade the emigration of skilled mechanics. Samuel Slater, an Englishman who had made himself master of the machinery and methods, knowing of the large sums offered in this country for the machines, managed to make his way to New York, and in 1790, having entered the employ of Moses Brown of Providence, undertook the manufacture of machinery of the English type at Pawtucket. He was successful, and one year later started a small mill there with machinery built on the Arkwright principle.

The introduction of English machinery, together with the invention in 1793 of the cotton gin, by which one man could clean for market a thousand pounds of cotton in the time formerly taken to clean five or six pounds, gave an immediate impetus to the business, and many men who had learned it under Slater, left his employ to start plants of their own. By 1809 there were in Providence and vicinity 17 mills, running 14,296 spindles, and the United States census of 1810 showed 238 mills, of which 54 were in Massachusetts, 28 in Rhode Island and 64 in Pennsylvania.

It was not until 1838 that an English self-acting mule was brought to this country by William C. Davol. To escape the British laws, which still forbade the exportation of machinery, he went to England and after purchasing and cutting to pieces a Sharp & Roberts mule had it shipped to America by way of France in boxes labelled "Glass." On its arrival, he set it up in his own shop in Fall River, and subsequently manufactured many of these machines for American Mills.

EARLY COTTON MANUFACTURING

The year 1813 marked the beginning of cotton manufacturing here on a substantial basis. In that year two companies were formed, the Troy Cotton & Woolen Manufactory, with a capital of $50,000, which is still in existence as a successful corporation, and the Fall River Manufactory, with $40,000 capital, which only a few years ago was purchased by

the Pocasset Mfg. Co. About one half the capital was secured in the neighboring towns.

David Anthony, who became the first agent and treasurer of the Fall River Manufactory, was a native of Somerset, and was at this time only 26 years of age, but had acquired a thorough practical knowledge of the business under Slater at Pawtucket. A three-story mill, 60 by 40 feet, the lower story of stone and the upper two of wood, and designed for 1500 spindles, was begun at once, on the Quequechan, the portion of which below the Troy dam is often alluded to as the Fall River, about where the mill now known as the Fall River Manufactory stands. It was completed and began operations in October, 1813, and was the first cotton spinning plant in the village.

Oliver Chace, the originator of the Troy, had been brought up as a carpenter, but had acquired a practical knowledge of cotton manufacturing from a small mill which he had for a time owned and operated at Dighton. The Troy mill was larger than the Fall River and was built of stone, 108 feet long, 37 feet wide, four stories in height, with a low hip roof. It was located near the site of the present Troy mill, and was designed for 2,000 spindles. Both it and the Fall River were operated by water power derived from the Quequechan river.

The Fall River Manufactory was the first to secure a picking machine, which had just been introduced in this country. The mills had been paying four cents a pound to have the cotton picked by hand, and the machine saved three quarters of the cost, though it was opposed by consumers, who believed that it injured the staple.

The Fall River was also the first to introduce power looms, in 1817. The first weavers were paid $2.50 a week, but when they had become more experienced a change was made to one cent a yard. Cloth was woven one yard wide, and sold for 25 cents a yard. Power looms appear not to have been installed in the Troy mill until 1820.

The two mills had been started before the close of the war of 1812, when American markets were closed to English manufacturers and the demand was brisk, but they had scarcely begun operations when the war ended, again allow-

ing the entrance of British goods, and it was not until 1820 that the Troy paid its first dividend. Four years later it declared a dividend payable in cloth on demand.

The original Troy mill was burned in 1821, but rebuilt in 1823. In 1843 a three story addition was made, which ten years later was raised two stories and extended 80 feet on the south. In 1860, the mill of 1823 was removed, and the part known as the New Mill erected, five stories in height, extending to Bedford street.

The Fall River Manufactory's Nankeen Mill, and the original structure, known as the "Yellow Mill," were torn down in 1839 to make room for the "White Mill". The latter was burned in 1868, and the present structure, since enlarged, succeeded it.

The Union Cotton Factory was also started in 1813, with 50 shares, held by 31 stockholders, and began operations in a wooden structure on the site of the Laurel Lake Mills, then a part of Tiverton. This was burned in 1838.

The third large corporation to be formed was the Pocasset Mfg. Co., organized in 1822, with $100,000 capital. It acquired a considerable tract on both sides of the river, west of Main street, including the water power, and in 1827, after tearing down a grist mill which stood on the spot, erected on the north side of the stream, near the street, the "Bridge Mill," a three-story stone structure, 40 by 100, with a long ell over the river. It installed 1,000 spindles, and manufactured the first print cloths made in this city,—seven-eighths of a yard wide and 44 picks to the inch. It was burned, together with the old fulling mill, which stood further south, in the fire of 1843, and the company soon after erected near the site, the present Granite Block. A few years later it constructed a part of its present mill, 219x75, and five stories in height, by far the largest factory which had, up to this time been built here, and notable for its width as well as its other proportions. It began operations in 1847.

Early in its career the company had built a number of small stone mills to rent. In one of these, known as the Satinet Factory and built in 1825, was manufactured a woolen cloth from which the mill took its name. In part of this same

building the Robeson Print Works was started. It was torn down to make room for the present mill. The company also built in 1826 the "New Pocasset," which was leased for cotton manufacturing.

One of these mills is still standing and operated as a part of the Pocasset plant of to-day. This is a small mill on Pocasset street, west of the main plant, built in 1827 and known first as the Massasoit and later as the Watuppa. It was leased in part to Brown & Ives of Providence for cotton manufacturing, but they became dissatisfied and sold out to Holder Borden, who opened the partitions and equipped the whole mill with cotton machinery. He discarded the old methods of distributing power by gearing, and was the first to introduce belting. The mill was equipped with 9,000 spindles, and was considered a wonder for size.

The lease ran out about 1843, and the proprietors then erected on Davol street, the Massasoit Steam mill, so designated because it was one of the first, if not the first here to be operated by steam rather than water power. It was burned in 1875, and the site is now occupied by the Massasoit Mfg. Co. The 1827 mill, originally known as the Massasoit, was for a time run by a corporation known as the Watuppa Cotton Mill, and in time became a part of the Pocasset plant.

Still another early mill was the Annawan, which stood on Pocasset street where the Iron Works No. 7 now is, and was torn down when that was erected in 1905. It was built in 1825, a large factory for its day, and continued in operation until about 1890.

In addition to the mills named, there was also a plant for the manufacture of cotton batting, owned by I. Buffinton & Son, and carried on first at Sucker Brook, and subsequently on the site of the Fall River Bleachery on the same stream. It was established in 1838.

At the time these early mills were built, work began at 5 a. m., or at daylight and continued until 8, when half an hour was allowed for breakfast. Another half hour was given at noon for dinner, and work then continued till 7:30 in the evening.

The superintendent of a mill in 1830 received $2 a day, an overseer $1.25 and the majority of operatives from 83 cents to one dollar a day.

The Pocasset mill of 1847 which, it will be remembered, was of phenomenal size, for its day, was the result of the conviction of its superintendent, that a large mill could be operated more economically than the small ones then running, and though there were those who predicted failure, the mill justified his anticipations. This was also the first mill to be erected in which details had been carefully worked out, before beginning construction, as to the location of machinery, shafting and belting, a plan which resulted in a great saving over the old methods.

The Metacomet mill, when built in 1846 by the Iron Works Co., was constructed from the plans of a model mill in Bolton, England, and was the first to have iron posts and girders, thereby preventing a settling of the mill, with consequent friction and loss of power. The mill attracted great attention from manufacturers in other parts of New England.

The American Linen Co. was formed in 1852 to make the finer grade of linen fabrics, the first enterprise of the kind in the country. Operatives and flax were imported from Europe, and for a time there was an active demand for the product. This fell off, however, in consequence of the increasing use of cotton and woolen fabrics, and in 1858 the linen machinery was removed and cotton manufacturing begun.

OTHER INDUSTRIES

In addition to the many plants engaged in the manufacture of cotton cloth, the larger industries of Fall River include two print works, a bleachery, mills for the making of cotton yarn and sewing thread, extensive hat factories, a piano factory, machine shops, foundries and mills for the utilization of cotton waste and the making of absorbent and jewelers' cotton. There are also three large breweries, now under one management.

Probably the best known of these plants is the American Print Works, which was established by Holder Borden and others in 1834, and began operations in January, 1835, with a capacity of 2,000 pieces a week. The plant was gradually enlarged, and in 1854 had increased its capacity to 9,000 pieces. Large buildings of stone were erected in 1867 to replace the original buildings of wood but burned late in that year. They were at once rebuilt, but the uninsured loss had been so large that in 1879, suspension became necessary. In 1880 a new corporation was formed known as the American Printing Co., with a capital of $300,000, since increased to $750,000. The plant has been steadily increased until it is now the largest in the United States and operates 30 printing machines, with a weekly capacity of 100,000 pieces, which are sold all over the world. The corporation owns all the stock of the Fall River Iron Works Co., which in the last 20 years has erected six large mills and remodelled one other and now operates 488,000 spindles and employs 5,000 hands. M. C. D. Borden of New York, a native of this city, controls the business.

Another print works is that of the Algonquin Printing Company, incorporated in 1891. This has grown from a plant having a weekly capacity of 3,600 pieces to 40,000, and now operates 12 machines and employs some 350 hands.

Earlier print works, no longer in operation, included Robeson's, known as the Fall River, and the Globe Print Works, later known as the Bay State. Robeson's print works, the first in this city, had been started on the stream, west of the Pocasset Mfg. Co., by Andrew Robeson of New Bedford, in 1826. The work was for a time done by hand by the block process, which, indeed, continued to be used till 1841, but in 1827 what was probably the first printing machine in the United States was set up and was operated successfully for many years. The depression of 1848 forced a suspension and reorganization and about 1860 cotton machinery was introduced. The plant was run as the Quequechan mill until the early 80's.

Mr. Robeson bought and printed the first print cloths made in Fall River. He departed from the custom of "store

pay," by which employees were paid in goods from a store owned by the factory, then in use here, in common with other manufacturing communities, and gave cash, thus allowing his employees to buy wherever they pleased. The change was so satisfactory that company stores soon disappeared. Another act for which he is remembered, is the furnishing a school room and teacher for his juvenile employees, to whom he allowed one third of each day for study.

The Globe Print Works were at Globe Village, on the stream flowing from Cook Pond into the bay. They were the successors of Col. Durfee's pioneer mill, which had been purchased in 1829 by Potter and Chatburn and converted into a print works, beginning operations in 1830. The plant was enlarged and run by various persons and was known for a time as the Tiverton and afterward as the Bay State Print Works. About 1858 it was purchased by the American and run by this corporation till it was burned in 1867.

The Fall River Bleachery, which has a capacity of 50 tons daily, was organized in 1872 on the site of the mill of I. Buffinton & Son, and began operations the following year. The No. 2 works were built in 1888, and additional buildings have been erected in recent years.

The two large yarn manufacturing plants, which have a combined spindleage of 131,000, are now a part of the New England Cotton Yarn Co. and under lease to the Union Mills, but were formerly the Globe Yarn Mills and the Sanford Spinning Co. The Globe Yarn, started in 1881, and repeatedly enlarged, produces weekly 140,000 pounds of yarn and thread, and employs 750 hands, while the Sanford Spinning, started in 1891, to make colored and fancy yarns, produces 120,000 pounds a week and employs 550 hands.

The Kerr Thread Mill was built in 1888, for the manufacture of fine cotton yarns and sewing thread. It became a part of the American Thread Co. in 1898. A new mill was erected in 1907, and the plant now has 105,000 spindles, employing 1100 hands.

The Massasoit Mfg. Co. and the Estes Mills are engaged in the handling of waste. The product of the Massasoit, in addition to various grades of cotton waste, includes mops,

yarns, wicks, and spun and bleached cotton, while the Estes Mills produce sash cord, yarns, mops, twines, warps, clothes lines, wicking, absorbent and jeweler's cotton as well as waste of a variety of grades. The Massasoit has a large foreign trade, and additional plants in Connecticut and the South.

The plant of Kilburn, Lincoln & Company is among the large makers of looms for cotton and silk weaving and of power transmission machinery in the United States and makes about 5,000 looms annually, giving employment to about 300 hands. It is the outgrowth of the union in 1847 under the name of E. C. Kilburn & Co. of the loom-making and shafting business which had been established previous to 1840 by Jonathan Thayer Lincoln and that started in 1844 by John Kilburn. In 1856 this became Kilburn, Lincoln & Son and in 1867 took its present name and a large machine shop and an iron foundry were erected the same year, and other additions have followed.

A large iron business was formerly carried on here by the Fall River Iron Works Company, which at one time, about 1876, gave employment to 600 men. It was started in 1821 by Bradford Durfee and Richard Borden for the manufacture of iron work for shipbuilding and later made hoop iron for the New Bedford oil trade and still later, nails. It was immensely successful for many years, and was the principal originator of the Annawan and Metacomet Mills, the gas works, the steamboat line to Providence and the railroad to South Braintree. From an original investment of $18,000 its stockholders received between 1850 and 1880 $3,073,000, besides stock in the Troy Cotton & Woolen Manufactory, the Fall River Manufactory, the American Print Works and the Bay State Steamboat Company, later the Fall River Line. In 1880 the property was divided and the stockholders given shares in new corporations known as the Metacomet Mills, the Fall River Machine Company, the Fall River Gas Works Company and the Fall River & Providence Steamboat Company. The manufacture of iron was discontinued soon after in consequence of the competition of plants nearer the mines. Shortly after 1896 the stock was acquired by M. C. D. Borden, who retaining the old charter, which was of value, tore down

the buildings and began the erection of cotton mills to supply cloth for the American Printing Company of which he was also the owner.

The extensive powers given by the charter of the Fall River Iron Works Company, if more than accidental, indicated a long view into the future. Though organized primarily to carry on the iron business, the company from time to time launched into many and varied lines as its growth demanded or as opportunity made desirable. When, for example, the iron business was removed from its original location near the outlet of the Quequechan, to that adjoining High Hill, in order to utilize the former site the company built the Metacomet Mill for the manufacture of cotton cloth. It had already found that Providence was a good market for the product of its iron mills, and had accordingly purchased a site and erected a substantial wharf there, near which it also constructed a brick office building and storehouse, which was maintained until the closing of the works.

As from time to time increased facilities were needed, the company provided them for its own use, but always looking forward to the time when others would avail themselves of the opportunities offered. Under this policy it built gas works, and a cooper shop for the making of nail kegs, as well as carpenter, blacksmith and machine shops, the last occupying the building vacated by the Fall River Railroad on its consolidation with the Old Colony Railroad. When it needed additional machinery for the nail factory, it built it here. It also added a boiler shop, and wharves, one of which became known as "Derrick Wharf," because of the large derrick erected there for the handling of boilers and other machinery for steamboats. The desire to obtain a location where larger vessels could dock at any stage of the tide was one of the prime factors in bringing about the removal of the works to their new location.

All work was done by employees of the company. In wharf building no divers were to be had, and the method employed was that of "poling", that is, the location of the stone was determined by feeling under the water in the mud with a long wooden pole for which an iron rod was later

substituted. In this way many of the present walls were built.

After the company opened an agency in Providence, means of transportation became necessary, and the establishment of the Fall River & Providence Steamboat line naturally followed.

The Fall River & Providence Steamboat Company was noted for its regularity and punctuality. When the sailing time arrived, the boat sailed, leaving for the next trip such passengers and freight as were not on board. In order to fill promptly the orders of the Providence agency, the steamers sailed every day, except Sunday, though in severe winter weather it sometimes made necessary the employment of a large number of men with saws and other tools to cut a way through the ice from the wharf. Occasionally in mid-winter it was necessary to cut a channel in this way as far as Mount Hope and sometimes even to Bristol Ferry.

The steamer King Philip was built as an ice-breaker, and met her designer's expectations. In meeting ice, her bow rose and slid along the top till the boat's weight caused it to break. She was also the first steamboat in American waters to carry a steam whistle.

The company, which also owned wharf property and buildings at Bristol and Bristol Ferry, found it necessary to dredge its docks from time to time, and accordingly built a dredger of its own, the power for which was furnished by six horses driven around a circle in the hold.

As the iron works grew and castings became necessary, a large foundry was built on the north side of Mill street, a short distance east of Pond street.

The company deemed it unwise to undertake coal mining, but several of its owners purchased a large tract at Frostburg, Md., and mined coal which was sold in the open market as well as to the Iron Works Co. This venture, like the others, was very profitable.

The same owners, with others, also built vessels to bring coal, iron, iron ore, etc., to the works and to carry away the finished product. These had a carrying capacity of from about 100 to 450 tons, and among them were the sloops Ann B.

Holmes and Isaac H. Borden and the schooners Sea Bird, Minerva, Richard Borden, Ellen Barnes, Jane F. Durfee, Iram Smith, Enoch Pratt, Daniel Brown, Sallie Smith, Orion, Saphronia, Anna M. Edwards, Ney, Martha Wrightington, Thomas Borden, Matthew C. Durfee, Carleton Jayne and Fountain.

A marine railway was early a part of the company's plant. This was originally near the present wharf station, but was later removed to a point on the shore where the company's cotton mills now stand. The railway's buildings were leased to various persons, who maintained shipyards till about the time of the sale of the property to M. C. D. Borden. The last vessels were built here in the early 70s and were the schooners D. M. Anthony and Carrie S. Hart and the barkentine David A. Brayton, all of about 800 tons capacity.

Feeling that the Fall River Line was not making fair freight rates to New York, local parties in 1866 purchased from the government the steamer United States and established an independent freight line. Subsequently, the Albatross was bought from the same source, and the line was continued for some years, but was finally taken over by the older company.

The first freighter used in these waters is supposed to have been the sloop Irene and Betsey, owned by Richard and Jefferson Borden, which was probably the forerunner of the Fall River & Providence Steamboat Company.

The latter company, as it was the first to install a steam whistle on its steamers, was also the first to equip a vessel with a calliope. The Canonicus carried such an instrument, but it was soon found that its music, while pleasing at a distance, was not satisfying to those on board and it was removed. There was also difficulty in obtaining sufficient steam for both the engines and the calliope.

Among the earlier excursion steamers in the harbor were the Jennie Lind, the Teaser, the Young American and Water Lily which were run between Taunton and points along the bay. The Teaser was a "stern-wheeler", or "wheelbarrow", having a paddle wheel at the stern, extending the entire width of the boat. This type was then common and is still

seen on southern inland waters where only light draught vessels can be used.

The beginning of what afterward became the Dyer Transportation Company was in the square-ended scow schooner Nimrod, used by Capt. Henry Dyer, who, tiring of his occupation as a tailor, turned master mariner. The scarcity of wharves did not inconvenience him, for he ran his schooner on the shore when the tide was full, so that she could be loaded or discharged at low tide from wagons that had driven alongside. When the tide was high again, sail was made, and the craft departed for the next port. She was run to Newport, Providence, Taunton, and, at times, to New Bedford. She was followed by the Dart, built in 1837, which was supplanted by the Caroline, built here in 1858, and later by the steamer William Marvel, which connected at Providence with steamship lines for Philadelphia, Norfolk and Baltimore.

The large hat-making business of James Marshall & Bros., employing 1500 hands, has grown from a small hat concern moved here from Bridgeport, Conn., about 1887, until now it makes 7,200 dozen derby hats a day, as well as soft hats and hats for women and children, and has lately established a department for the making of straw hats. The New England Fur Cutting Company was organized in 1893 for cutting hatters' fur and skins for fur garments, and the making of fur caps, muffs, etc. In a single year this plant now uses more than 9,000,000 rabbit skins in producing fur not only for the hat factory but also for other manufacturers throughout the country.

The Cote Piano Mfg. Co., which began business on Pocasset street some years ago, and subsequently moved to Alden street, has become one of the largest factories of its kind in the United States. It makes every part of the piano and employs 375 hands. Last year it manufactured 7,000 instruments.

The making of braids, loop banding, lacings, etc., has also become a considerable industry in recent years, and several plants are devoted to the production of goods known under the general name of narrow fabrics, to which have

been added in some cases, cotton rope and clothes lines. The most recent is the Standard Fabric Co., which has a capital of $150,000, and is now erecting a mill in the eastern section.

A large machine shop was formerly operated on Pond street by a firm that in the latter part of its history was known as Marvel & Davol. It made machinery for cotton manufacturing, specializing on mules, and in 1870 employed 250 men. It was established in 1821, in a building of the Pocasset Mfg. Co., as Harris, Hawes & Co. and afterward became O. S. Hawes & Co. and still later, in 1841, Hawes, Marvel & Davol. The name was changed to Marvel & Davol in 1857, and the shops subsequently purchased and operated by the Fall River Machine Co. until after 1900.

During the height of the whaling from this port, between 1840 and 1850, an oil refinery was carried on in a stone building still standing on Pardee & Young's Wharf, then known as the "Oil Companies Wharf."

The manufacture of oil cloth was another early industry. There were at one time three plants engaged in this business, one on the shore, south of the American Linen Co., one on Bedford street and one at Bowenville.

The city has large quarries of excellent granite, from which several important buildings have been constructed, notably the city hall, Granite Block, St. Mary's cathedral and the Slade school. The lower story of the B. M. C. Durfee high school building is also of this material, which has likewise been used in the building of wharves and in the construction of many of the mills. Fall River granite has also been used in some buildings at Newport, R. I. The quarries are in the eastern section, and give employment to a considerable number of men.

WATUPPA RESERVOIR COMPANY

Through history passed down from one generation to another, we learn that very early in the nineteenth century a primitive dam had been constructed across the Quequechan river in the vicinity of the present Watuppa dam, for the

purpose of providing a constant supply of water for a small business (the nature of which is unknown) carried on at that point. On the building of the Troy Cotton & Woolen Manufactory in 1813 this dam gave way to the dam of that company, by which the water in the river was raised to a point three feet above its original level. As business along the Quequechan increased, it became evident that if the mills were to run throughout the year, the waters of the Watuppa ponds must be stored in times of flood for use in time of drought. Accordingly, in 1826, an act of the Legislature (Mass. Special Laws of 1826, Chapter 31) was obtained, incorporating the Watuppa Reservoir Company. The names of the incorporators being as follows: David Anthony, Nathaniel B. Borden, Oliver Chace, and Bradford Durfee. The object of the incorporation, as given in the Act, was, "for the purpose of constructing a reservoir of water in the Watuppa ponds..... for the benefit of the manufacturing establishments on Fall River; and, for this purpose, shall have all the privileges and immunities, and be subject to all the duties and requirements contained in an act passed on the third day of March in the year of our Lord one thousand eight hundred and nine "entitled an act defining the general powers and duties of manufacturing corporations," and the several acts in addition thereto."

Section 2 of this act provided that the company should have power "by erecting a dam across the outlet of said ponds ..... to raise the water in said ponds, two feet higher than the dam already erected by the Troy Cotton and Woolen Manufactory."

Section 4 provided "that the capital stock of said corporation shall be divided into one hundred shares."

Section 5 provided that said corporation should be "liable for damages to any person by flooding."

Preparing to act under authority given, the company proceeded to settle with the owners of land adjacent to the Quequechan river and to each of the two Watuppa ponds for the damage they were to sustain by the flowage of their land. Most of these settlements were easily obtained. In some cases, however, the price demanded and received was quite large. In quite a number of instances, public spirited indi-

viduals refused to make any claim, believing it a work of great public benefit which should be assisted rather than discouraged.

That the business of this time was conducted by men possessing great foresight is attested by the fact that the company refused to take advantage of any person's liberality and insisted on paying for the privilege, even if but a nominal sum. Such sums were received with a "Thank you", and the agent in every case took a receipt for the money paid. This receipt found safe lodgement in the company's strong box and was found of great value later.

The Watuppa dam now standing in the rear of the Troy building was constructed under authority of this act, and is capable of holding the waters of the Watuppa ponds at an elevation five feet above the original height of the ponds, thereby increasing the capacity of the ponds 5,133,234,600 gallons. It is easy to understand the difficulties encountered in the running of machinery on a stream where from six to eight months of the year flood conditions prevailed, while during the remainder of the year there were times when very little water could be depended upon. Owing to the long workday then the rule (often extending from daylight to dark) the quantity of water used was much in excess of what would be required at the present time.

The Watuppa Reservoir Company is still in existence, its stock being held by several of the mills located on the river.

Until within a few years this company held absolute control of the water in the Quequechan but by the terms of a recent agreement, such control (under certain restrictions) is vested in the Fall River Iron Works Company or its management.

The original outlet of the river was into the creek south of Central street mentioned elsewhere.

About 1835 a canal was constructed to conduct the water into what is known as Crab pond. This pond was formed by the construction of a dam across the outlet of a body of salt water originally known as "Long pond" in which the tide ebbed and flowed but which was at low tide a pond. The

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NOTE—None of the mills now depend exclusively on water for power.

depth of water was thereby increased about fourteen feet, adding greatly to its capacity. This for many years furnished power for the American Print Works and the Fall River Iron Works and is still used by the printing company in connection with its business. For many years ice was cut here for domestic use. An ice house stood on the west side of the pond on what was known as "High Hill," and near by stood a stone "powder house" owned by the Iron Works Company.

DEVELOPMENT OF THE POWER FOR THE MANUFACTORIES

During the earlier period of the development of manufacturing, the plants were small and could not be very large as the available water power was limited, and the water wheels were crude, clumsy and inefficient.

The water wheels first installed were probably of the type known as the breast wheel, which was not so efficient as the more modern type of turbine water wheels. The first turbines were made with revolving shaft vertical and a pair of bevel gear wheels to transmit the rotation of the vertical shaft to a horizontal shaft. Later horizontal water wheels of higher speed having the revolving shaft horizontal and the power transmitted therefrom by belts, were installed in most of the plants on the Quequechan river.

The height of fall and power of the several plants were as follows:

	Height of fall	*Power*
Troy Cotton & Woolen Mfg.	10 to 15 ft.	150.6 H.P.
Pocasset Mfg. Co.	21.67 "	225.4 "
Quequechan	21.00 "	218.4 "
Watuppa	15.38 "	160. "
Fall River Print Works	10.00 "	104. "
Fall River Mfy.	14.46 "	150.4 "
Annawan Mfy.	14.73 "	153.2 "
Metacomet Mfg. Co.	16.18 "	148.2 "

The last mentioned discharging into tide water, varied in height of fall and power and the Troy varied as to fall and power according to the height of water in the pond.

When the demand for larger capacity in the manufactories became more pressing the power was supplemented by the steam engine. As the supply of water decreased from drought and overusing the flow of the stream, larger engines were installed, capable of driving the whole of the machinery. Until this time the mills on the Quequechan river having all the available water power were the only factories built, except some at Globe Village. When the steam engine was required by these mills, it placed them in a position to invite competition and other factories were erected in various parts of the town.

The Massasoit Steam Mills, situated on Davol street near the shore of the bay, was probably the first factory in Fall River driven wholly by steam power. This mill was erected about 1845 and destroyed by fire in 1875.

The next factory driven entirely by steam power was the Wamsutta Steam Woolen Mills situated near Pleasant street on the shore of the upper Quequechan river from which it derived the water used for making steam and for condensing the steam after passing through the engine. This mill was erected in 1849 and still stands.

The Union Mill on Pleasant street was one of the earlier steam driven factories and was erected about the year 1860 just before the Civil War.

This factory was the first in town to be heated in winter with exhaust steam from the engine.

This engine was one of the Corliss type afterwards famous throughout the manufacturing world. It was in fact, two single cylinder engines having a common shaft with cranks on each end. The steam entered the cylinder pushing forward the piston part of the stroke then the supply was cut off and the steam in the cylinder expanded to about atmospheric pressure, when it was allowed to escape into another chamber and condensed, forming a vacuum on the return stroke of the piston thus increasing the power about 25 per cent over the non-condensing type. One of the two cylinders was so made that the exhaust from each end was separated. In cold weather the steam from both ends was exhausted and used for heating the buildings and for dressing the warps for the looms.

In warm weather when no heat was required in the building only steam from one end of the cylinder was exhausted for dressing the warps, the steam from the other end being exhausted into the condenser.

When this engine was installed it was understood the contract stipulated that the price for the steam plant should be a certain sum or the saving for a period of time, over the former manner of running engines in factories.

This was an unusual proposition and after running the plant as designed, for only a short time, the management saw that it was for its advantage to pay the stipulated amount at once rather than pay over the saving for the length of time proposed, as the economy was so great and satisfactory.

This form or type of engine was used in most of the subsequent factories erected until the building of the Globe Yarn Mills No. 2 in 1886-7 when the first compound condensing engine was installed. The compound engine consisted of two cylinders, the smaller one called the high and the other the low pressure cylinders. The steam first entered the high pressure cylinder and after following the piston part of the stroke the supply was cut off and the steam in the cylinder allowed to expand to about eight to ten pounds pressure when it was exhausted into the larger cylinder and expanded in same to a vacuum by condensing the steam on the return stroke, thus increasing the power derived from the same amount of steam that was formerly used in the simple condensing type of engine heretofore used.

Since that time most of the factories erected have installed compound engines and nearly all of the older mills have replaced the simple condensing engines with the compound condensing type.

The economy of the compound condensing engine over the simple condensing type is about 33 per cent. or, in other words, it requires in the modern compound condensing engine less than two thirds the amount or weight of steam, that is required in the simple condensing engine, which in our mill plants of large powers amounts to a considerable saving.

Of late years the electric drive has come into use in many cases, especially when the power is to be transmitted some distance from the engine.

The electricity is usually produced on the mill plant by direct connection of the generator with the steam engine, and the current of electricity sent over suitable wires or cables to the motors in the various buildings or rooms of the factory.

Systems have been introduced of compound non-condensing engines which furnish part of the power required, and which is transmitted direct to the shafting in the factory by belts, and the steam, in place of being condensed from the engine, is passed on through suitable pipes into a low pressure steam turbine and afterwards condensed, forming a very high vacuum, thus producing additional power without increase of the amount of steam used.

This combination of compound engine and low pressure turbine makes an increased economy of sixteen to twenty per cent. over the usual compound condensing engine.

This arrangement brings the power question up to date and highest economy. The power used in our modern factories varies according to the size of the plant, in some cases being as high as 2500 to 3000 horse power while in the mills of the earlier periods of our history the power used was probably not much more than 125 to 200 horse power according to the fall of the water. Speed of engines has increased from less than 50 to 120 revolutions per minute or a piston speed of 960 feet per minute, and a belt speed of over a mile per minute.

BANKS AND BANKING

With four national banks, a trust company, four savings banks and four co-operative banks, Fall River furnishes ample financial facilities to all. The history of the institutions shows not a single failure in their long career.

Fall River was one of the earliest communities in the United States to establish a savings bank, it was also one of the first to start a five cents savings bank, and the more than $22,000,000 in deposits now standing to the credit of the 55,000 depositors in the four savings institutions show the value of these banks to the community and the extent to which they are appreciated. The same may be said, and with equal

justice, of the more than 40,000 shares in local co-operative banks now outstanding, representing a sum in excess of $2,000,000 due to shareholders.

The four national banks of the city showed by recent reports in 1911 a combined capital of $2,200,000, deposits of $6,354,000 and surplus and undivided profits of $1,589,000 while the B. M. C. Durfee Safe Deposit & Trust Co. reported deposits of $2,363,000 and surplus and undivided profits of $460,000.

The oldest of the city's banks is the Fall River National, incorporated in 1825 as the Fall River Bank, and for over 20 years the only bank of discount here. It became a national institution in 1864. Its first building was of brick on the site occupied by the present banking house, and was erected in 1826. It was burned in 1843 but rebuilt. The building now occupied was erected in 1892.

The oldest of the saving banks is the Fall River Savings Bank, which was chartered in 1828, only 12 years after the establishment of the first savings bank in the country. It was first known as the Fall River Institution for Savings, but changed the name to the present title in April, 1855. It was located in the office or store of the man who was its treasurer at the time, until about 1844, when it occupied a part of the rooms now used by the Fall River Five Cents Savings Bank, removing to its present building in 1869.

The National Union Bank was chartered in 1823 as the Bristol Union Bank of Bristol, R. I., but removed to Tiverton in 1830, changed its name to the Fall River Union Bank and erected a brick building on the corner of South Main and Rodman streets in 1837. The change in the boundary line in 1862 brought it within Massachusetts territory, and it removed to the southwest corner of city hall. It became the National Union Bank in 1865 and again removed to Number 3 Main street, where it occupied quarters with the Union Savings Bank till it was merged with the Massasoit-Pocasset in 1903.

The Massasoit Bank, organized in 1846, became a national institution in 1864. Its office was at the corner of North Main and Franklin streets till 1876, when it removed to the north-

east corner of Main and Bedford. In 1884, it again transferred its office to the northwest corner of Bedford street and Court Square, and in 1889 it erected the building at the corner of Bedford and Second streets; this was removed in 1910 to make way for the new structure of its successor, the Massasoit-Pocasset National Bank.

The Metacomet Bank dates from 1853 and carried on its business at the corner of Anawan and Water streets, on the second floor, in what is now the office of the American Printing Company, until 1876, when it removed to an office on the corner of South Main and Pleasant streets, in the Borden Block. It erected its present building in 1888, and remodelled it in 1910. It became a national bank in 1865, and in 1903 purchased the Second National, formerly the Wamsutta. The latter was chartered in 1856 and became a national institution in 1864, changing its name to the Second National. It occupied an office with the Fall River Five Cents Savings.

The Pocasset Bank was incorporated in Rhode Island in 1854, and carried on business at South Main and Rodman streets, till after the change in the boundary line, when it removed to the northwest corner of city hall. In 1872 it erected the building now occupied by the Citizens Savings Bank. It had become a national institution in 1865, and was merged in the new Massasoit-Pocasset when that was formed in 1903 by the combination of the Pocasset, the Massasoit National and the National Union.

The First National Bank, the first to be formed here under the federal banking law, was organized Jan. 23, 1864, and was located at the southwest corner of Main and Central streets, in Granite Block, till it occupied its present building in 1888.

The B. M. C. Durfee Safe Deposit & Trust Co. was chartered in 1887, when it took over the private banking business of B. M. C. Durfee & Co., a partnership composed of Mr. Durfee and John S. Brayton.

The Citizens Savings Bank was formerly The Savings Bank of Tiverton and was organized in 1851 and occupied rooms with the Fall River Union Bank. After the change in the state line it was authorized to do business in Massachusetts

and assumed its present title. It occupied rooms with the Pocasset Bank in the northwest corner of city hall until 1873, when it removed to its present quarters.

The Fall River Five Cents Savings was incorporated in 1855 and the Union Savings in 1869. The latter's office was in the southwest corner of city hall until 1872, when it removed to the location on Main street where it erected its present building in 1897.

Of the co-operative banks, the Troy is the oldest. It dates from 1880 and until 1883 was known as the Troy Co-operative Savings Fund and Loan Association. The People's Co-operative was organized in 1882, as the People's Savings Fund & Loan Association, but took its present name shortly after; the Fall River Co-operative Bank in 1888 and the Lafayette Co-operative Bank in 1894.

SCHOOLS

The small beginning from which the city's present extensive school system has grown, are perhaps, illustrated by nothing better than by the early appropriations for the support of the schools. In 1804, the year after the town was separated from Freetown, the amount raised to pay the expenses of the town schools was but $250, and this was to be divided among the several districts in proportion to the number of their inhabitants. More than 20 years later, in 1825, the appropriation was only $600, which was divided among ten districts, having 391 families.

The early buildings were few and small, and a map of 1812 shows but three schoolhouses, one near the present corner of South Main and Hamlet streets, one near the corner of North Main and Prospect streets, and one at Steep Brook. Private schools were common, and in 1826 were more numerous than those maintained at public expense. In the year named, there were 14 private institutions and 12 public schools.

The earliest school report in the possession of the public library is that for 1842-43, and this, with the reports for the

next few years, gives a fairly good picture of the schools of those days. The town was divided into 14 districts, each with a prudential committee of one, and there was a general school committee of three, elected by the town. The system was very unsatisfactory, and the general committee was outspoken in its condemnation. One district had no school building, and school was kept in "an unfinished room in an unfinished house," separated from the living apartments of the family only by a small partition. In other instances, the buildings were altogether too small, in poor condition and often unfit for school purposes. Discipline in many schools was poor, owing to the youth and inexperience of the teachers and the presence of unruly boys.

There was also "a lamentable deficiency of books", and in one district "at a late visitation of the committee, he found but a single volume in the whole school authorized to be used in our schools." Until about 1846, when the town appropriated $850 for their purchase, maps, globes and other apparatus were rare. In 1843 but one schoolhouse in the town had a bell, and as the districts did not seem inclined to purchase bells, the committee suggested an arrangement with the Pocasset Mfg. Co. for ringing its mill bell in the hope of reducing the cases of tardiness. After the fire of that year, when the Anawan street building was burned, school was held in the lecture room of the Unitarian church.

The reports criticise the conditions in each school and the success or failure of the teachers, by name, with startling frankness. That of 1843-44 declares that the custom of building cheap schools and employing cheap schoolmasters is not yet obsolete, and says that "there is not a single school room in this town where provision is made, as it should be, for the escape of bad air and the introduction of that which is pure and fresh."

Schools were frequently closed from lack of funds, and the report just quoted says, relative to this, that "when one-half of the grammar schools in a town like Fall River are suspended a part of the year for the want of funds, so that one man can send his children to school the entire year and his nearest neighbor, who pays the same tax, can send his

children only two-thirds of the year, there must be something radically wrong in the arrangement of the districts."

In some of the schools only winter terms were kept, and in many, men taught in winter, when the big boys attended, and women in summer. In the earlier reports, the standard pay for the women teachers was $16.25 a month, or $195 a year. A few years later some received $200 a year, paid quarterly, and some $220. The teachers were selected and contracted for by the prudential committee of each district, and then presented to the general committee for examination.

In 1841-42 the town raised by taxation but $2.35 for each child between 4 and 16 years of age, and the committee constantly urged, in its early reports, the need of more funds. The total school appropriation in 1842-3, when the census showed 1943 children between 4 and 16, was but $5,455.66, of which $255.66 came from the state. In 1847-48 $7,000 was appropriated by the town, and $455.87 received from the state.

School was kept on Saturday mornings, and for 46 weeks instead of 40 as at present. The regulations of 1844 provided that school should be held from 9 A. M. until 12 throughout the year, and in the afternoon from 2 to 5 in the summer and from 1:30 to 4:30 in the winter. Three vacations were allowed each year, two weeks from the last Wednesday in April, three weeks from the third Wednesday in July and one week from the third Wednesday in November. Fast Day, Thanksgiving, Christmas, the Fourth of July and every Saturday afternoon were holidays, "and none other shall be allowed except by special vote of the committee." By 1850 the entire day on Saturday was allowed as a holiday, as well as the day after Thanksgiving, but there were still 46 weeks of school each year.

After 1845 the schools began to show material improvement, in consequence of the influence of the state normal school, and in their progress kept pace with the other schools of the commonwealth.

About this time, also, a beginning was made in the construction of larger and better buildings. The present Anawan schoolhouse was built after its predecessor of that

name, (a remodelled Congregational church,) had been burned in the fire of 1843. It was regarded as a model, with "the most perfect school room in Bristol County", to quote from a statement of the committee in 1848. The High street building followed in 1846, the June street in 1849, the Columbia street and the High School in 1852 and the Maple street in 1855. The Morgan street dates from 1868, and since that time buildings have rapidly followed each other, as noted elsewhere, as the city has grown. Three will be completed this year 1911, the John J. McDonough, the William J. Wiley and the Hugo A. Dubuque. Sixteen other brick school buildings have been erected and occupied in the last 20 years.

Fall River was one of the earliest communities to establish a high school. This was in 1849, the same year as New York. In April of that year the town meeting authorized a high school, and appropriated $1,500 for its maintenance. The first session was held on May 10, in the private school which stood on the south side of Franklin Street, east of Oak, occupied by George B. Stone, who became the first principal. The building on the corner of Locust and June streets, later called the Foster Hooper school, was erected for high school use in 1852, and the school then removed to this structure, though only the upper room was seated until 1868, when the teaching of French was begun and a three years' English course inaugurated. When the school grew too large for this building, the first year classes were held in the Davenport school house.

Conditions were relieved greatly by the opening in 1887, of the B. M. C. Durfee High School, the finest gift ever made to the city, but in recent years even this has been crowded by its 900 students, and a new technical high school of four floors on the site of the Foster Hooper and June Street buildings was begun in May, 1911.

The first evening school was opened in 1848. A "factory school," probably the first of its kind in the State, was organized in 1868, at the Anawan building, for children under 15 years of age working in the mills, who were required by law to attend school 12 weeks in the year. The "factory school" continued forty-eight weeks, thus accommodating four sets of children for the required 12 weeks a year.

A school for truants and children of the inmates of the almshouse was held at that institution for many years, from about 1865 to 1890.

The district system, with at first 10 and later 14 districts, was retained until 1864. The first school superintendent was elected the following year, and began his duties in the fall of 1865.

A training school was established in February, 1881, in the Robeson School building, on Columbia street, and was removed to the Osborn Street school when that was completed in 1891. Special instructors in music and drawing were appointed in 1887; sewing, which had twice been tried for a short time, was permanently introduced in 1896, and the teaching of cooking authorized in 1911. Manual training was introduced with the opening of the new High School in 1887.

The providing of free text books, thus making public education absolutely without direct cost to parents, began in April 1874, this city being the first in the state to introduce this system. Its effects in relieving heads of families from a considerable expense, in the prompt supply of books when needed and in increased attendance were so satisfactory that the original outlay, though considerable, was well repaid. The general state law requiring free text books and supplies did not go into effect till August, 1884.

Parochial schools have been in existence here for many years, and many of them are well appointed, substantial and up-to-date structures, St. Mary's Cathedral, St. Anne's, Notre Dame, St. Patrick's, St. Louis, St. Joseph's, the Sacred Heart, The Blessed Sacrament, St. Matthew's, St. John the Baptist, St. Stanislaus, St. Roch's, and Espirito Santo, each support a parish school.

CHURCHES AND CHARITIES

Fall River has churches of many denominations, conveniently situated in all parts of the city, and the stranger, whatever his creed, is sure to find here companies of those in sympathy with him. Many of the edifices are noted for their architecture.

The citizens have been liberal in their gifts to charities, and handsome and commodious buildings have been erected for the care of the orphan, the aged and the sick, while the Boys' Club, the Young Men's Christian Association, the Women's Union, the Children's Home and the Bishop Stang Day Nursery testify to work along other lines.

The first church to be formed in what is now Fall River was the First Baptist, which was organized with 30 members on Feb. 15, 1781, and ordained its first pastor May 22, 1783. It was known as "The Baptist Church in Freetown, Dartmouth and Tiverton." The records are fragmentary, but it appears that a meeting-house was erected near the Narrows about 1800, and that at this time the name was changed to "The Second Baptist Church in Tiverton." In 1828-29 a revival took place, the name was again changed to "The First Baptist Church in Troy", which was later modified to agree with the change in the name of the town, and a new church built on South Main street and afterward sold to the Episcopal Society. The present Baptist Temple was erected and the first service held there July 1, 1840. In 1847 the church divided and the Temple was sold to the Second Baptist Society, which still occupies it. The First Baptist Church worshipped in Union Hall till its present edifice on North Main street was completed in 1850 and dedicated on October 23, of that year.

It has three large chapels—the Broadway, the Brownell Street and the Harrison Street. The Broadway, which, like the others, started as a Sunday school, began in 1857, and occupied a chapel at the northwest corner of Columbia and Canal streets, later sold for a Portuguese Catholic church. Afterwards, services were held on the second floor of the Ferry Street station till the present building at the southeast corner of Broadway and William street was completed. The Brownell street chapel was organized in 1871 as the Mechanicsville Baptist church, which name was later changed to its present title. The Harrison Street Chapel was started in 1885.

The First Congregational Church was organized January 9, 1816, but had no regular meeting place for some time. In

1821-22 a church was erected on a portion of the present Anawan school lot. It was 45 feet long and 36 feet wide, and had a vestry underneath. It was extended 25 feet in 1827 and was afterward sold to the Unitarian Society, and still later bought by the school district and converted into a schoolhouse. It was burned in the fire of 1843. The present North Main Street Church was built in 1832 and dedicated on November 21. A clock was placed in the steeple the following year. Work on a new church and parish house on Rock, Cherry and June streets was begun in the spring of 1911.

The Friends erected a meeting-house on the North Main street lot where their present church stands in 1821. This was soon found to be too small and was sold to the town and removed to Rock street, opposite the present high school, where it was used for a school-house. The present church was built in 1836. The denomination has a mission on Stafford road.

The First Christian Church was organized in 1829, and erected an edifice on Franklin street the following year. This was burned in the 1843 fire, and the present church then took its place.

The Unitarian Society was formed in 1832, and met for a time in the Old Line Meeting House on South Main street. It then bought the Congregational church on Anawan street, and in 1835 dedicated its present church, which then stood on the southeast corner of Borden and Second streets, and was removed to the location it now occupies on North Main street in 1860-61.

The oldest of the Primitive Methodist churches is the First P. M. Church, incorporated in 1874, though the first meetings of the denomination had been held three years previously. The church was completed in 1875 and the school room on Dover street in 1888. The Second Church was formed in 1891, and dedicated its edifice in 1893. The Sykes Church was organized in 1892.

The first Catholic service was held here, in a private house, in 1829, and late in 1834 the first attempt was made to form an organization. Land on Spring street, where St. Mary's Cathedral now stands, was purchased, and a small

wooden chapel erected in 1836, called St. John the Baptist. The chapel was extended on the south after 1840, with the result that the altar and six pews were in Rhode Island while the rest of the church was in Massachusetts. Soon after 1850 a new church became a necessity, and the work of laying the foundation for St. Mary's was begun. The cornerstone was laid August 8, 1852, and the walls, with the exception of the front, carried up to their present height, while the chapel within was still in use. The little building was then cut in two and removed to the site of the present rectory, where services were held till it was burned in 1856. From that time the congregation worshipped in the present church, which on the organization of the diocese of Fall River was made the cathedral.

The First Methodist Episcopal Church was formed in 1827 and erected a small edifice on the westerly side of what is now Camden street near Central street. It was later used as a dwelling and was taken down in 1910. A new church on the site of the present building on South Main street was constructed in 1840, burned in 1843 and at once rebuilt and dedicated in 1844.

The Church of the Ascension was organized July 15,1836, and met in the Pocasset house, which stood at the corner of South Main and Pleasant streets till 1840, when it bought the former First Baptist Church on South Main street. This was burned in 1850. It was at once replaced and was occupied till the church on Rock street, between Pine and Cherry streets was built and occupied in 1875 when the old church was devoted to business purposes. A large parish house on Purchase street was completed in May, 1911. The church has charge of St. Matthew's Mission on Locust street.

The Central Congregational Church was formed Nov. 16, 1842, by 70 members of the First Congregational and met in dwellings and in the Pocasset house till 1844, when it dedicated a wooden edifice on the northwest corner of Bedford and Rock streets. The present church was begun in 1874 and dedicated Dec. 13, 1875. The chapel was erected in 1891. For many years the church maintained a "city missionary," Rev. E. A. Buck, who did good work among the needy and

established a "mission school" at the corner of Pleasant and Sixth streets. On the retirement of Mr. Buck this was merged in the mother church.

The United Presbyterian church, dating from 1846, erected a small wooden church on the east side of Union street, south of Columbia and purchased its present edifice on Pearl and Anawan streets in 1851. This had been erected by members of the Christian denomination. It has a mission on Rodman street.

The Baptist churches have been increased by the addition of the Third in 1873 and the Trinity in 1905, the first the outgrowth of a Sunday school and the second of a mission. Colored churches of this denomination have also been established.

To the list of Congregational churches have been added the Fowler, a branch of the First, dating from 1874, the Pilgrim, formerly the Broadway, organized in 1894, and the French Congregational, which was formed in 1888 from a mission of the First.

From the small beginnings of the Catholic church have grown a score of prosperous parishes. Of these, that of the Sacred Heart was formed first, in 1873, and the church completed ten years later. St. Patrick's and St. Joseph's were organized shortly after, in 1874. St. Patrick's church was begun in 1881 and completed in 1889, while the cornerstone of St. Joseph's was laid in 1880 and the building dedicated in 1885. St. Louis parish was organized in 1885 and the church dedicated in 1890. SS. Peter's and Paul's was formed in 1882 and its church dedicated in 1900. The Immaculate Conception parish was also organized in 1882, and its church soon after begun and completed. St. William's was organized in 1905.

The oldest of the French Catholic churches is Ste. Anne's, formed in 1869. The communicants worshipped in a church at the corner of Hunter and Hope streets till the present magnificent building on South Main street was ready for use. It was dedicated July 4, 1906.

The parish of Notre Dame de Lourdes had been established in July, 1874, by a division of the parish of Ste. Anne. Its services were held in a church on Bassett street till this

was burned in November, 1903, when the present church, completed in 1906, was begun.

Other Catholic churches here are the Blessed Sacrament, formerly St. Dominic's, whose edifice was recently completed; St. Mathieu's, organized in 1886 and dedicating its church in 1896; St. Jean Baptiste, St. Roch's, Santo Christo, San Miguel's, Espirito Santo, Madonna de Rosario, St. Stanislaus and St. Anthony's.

St. Paul's M. E. church was organized in 1851 by 123 members of the First Church and erected a building on Bank street in 1852, which was enlarged in 1864. The Brayton M. E., until about 1870 known as the Globe Street M. E., was organized in 1854, the Quarry Street in 1870 and the North M. E. in 1859. The Summerfield M. E. Church was organized in 1875. It erected a building on Terry street and took the name of the Terry Street M. E. Church. In 1878 the edifice was removed to its present location on North Main and Hood streets. Five years later the church was raised and the name changed to the Park M. E. Church. The present title was assumed in 1890. There is also a colored church, the African Methodist Episcopal and an Italian Mission on Plain street, organized in 1905.

Nearly all the Episcopal churches were started by the Church of the Ascension. St. John's became independent in 1881, and erected a wooden church on South Main street, followed by the present stone church, in which services were first held on Easter Day, 1890. St. James was organized in 1883, and occupied its present church in March, 1885, St. Mark's erected a church on Mason street in 1888 and became independent in 1894. St. Luke's became a separate parish in 1896, and the present church was built soon after. St. Stephen's, formed from a mission of St. John's, was organized in 1896, and has just completed its church.

In addition to the First Christian Church, the city has two others of this denomination—the North, dating from 1842 and the Bogle Street, formed in 1876. The latter's edifice was built in 1885. There is also a chapel on New Boston Road, called New Boston Chapel.

Other churches here are the Globe or First Presbyterian, organized in 1890; the Reorganized Church of Jesus Christ of

Latter Day Saints, organized in 1863, whose church was built in 1876, burned in 1893, and rebuilt; the Church of the New Jerusalem, organized in 1854, whose edifice dates from 1869; the Advent Christian, organized in 1887, which erected a chapel the following year; the Church of Christ, Scientist, dating from 1892; the First Spiritualist Church and Lyceum; St. Paul's Lutheran Church, a Russian Orthodox Church, and the First Polish Church of the Blessed Virgin, the last-named a Polish National Catholic church. There are also four Jewish congregations—the Sons of Jacob, the Union Street Synagogue, the Congregation Adas Israel, and Aharat Achim.

The present Young Men's Christian Association dates from 1888 (though there had been an association here as early as 1857) and was housed from 1888 to 1895 in the Slade house, at the corner of North Main and Elm streets. It then removed to a house on the northeast corner of North Main and Pine streets on which site stands the large brick building which was dedicated April, 1903.

There are two temperance societies in Fall River, the Young Men's Irish American Catholic Total Abstinence and Benevolent Society and the Young Men's Protestant Temperance and Benevolent Society, both of which occupy substantial brick buildings of their own.

The work of the Women's Union began in 1873 in the Troy building. The present structure was completed in 1909.

The Boys' Club was organized in 1890 and had its first quarters on Troy street. The Anawan street building was erected and donated to the club by M. C. D. Borden in 1898, and the Pocasset street annex in 1908.

The Children's Home, organized in 1873, first occupied a building at the northwest corner of North Main street and President avenue, erected a frame building, followed by the present brick structure, at the corner of Walnut and Robeson streets, dedicated in 1895.

St. Vincent's Orphanage, founded in 1885, occupied a wooden building till its present brick home was completed in 1894.

St. Joseph's Orphanage, another large institution, is cared for by Notre Dame parish.

The Home for Aged People, organized in 1891, occupied the Leland House on High street in its early years. It dedicated its Highland avenue building in March, 1898.

Ste. Anne's Hospital, erected by the Dominican Sisters of Charity, of Tours, France, was dedicated February 4, 1906.

The Union Hospital, whose new building was opened in October, 1908, was formed by the merger in 1900 of the Fall River Hospital, founded in 1885 and situated on Prospect street, and the Emergency, established in 1895 in a building where the structure of the Women's Union now stands.

Two day nurseries, both established in 1910, care for infants while their mothers are at work. They are the Bishop Stang Day Nursery, in a building erected for its use on Third street, and the Ninth Street Day Nursery, started by The College Club, an organization of ladies. There is also an institution called the Seaside Home, situated on the shore of the bay, which cares for babies during the summer.

The Salvation Army work began in 1883. The headquarters were in Court Square for 11 years, and then in several locations till the Bedford street citadel was erected in 1903.

FIRE DEPARTMENT

The early fire department was entirely a volunteer one. The first engine, bought by the town in 1818, was a "bucket" engine, which drew water from a tub of the machine, filled by a line of men who passed buckets from one to another. A carriage, with a large number of buckets, attended it, but many of the citizens had their own fire buckets, generally of leather on which the name of the owner was painted and which they took with them when responding to an alarm. This engine was first stationed on the south side of Central street, near Inch, subsequently in the rear of city hall, and later still in the old town house on Central street. It was altered to a draught engine after the fire of 1843 and remained in service until 1853, when it was succeeded by Mazeppa No. 7.

Another engine was purchased by private subscription in 1826. This also drew water from a tub, which was forced,

without hose, through a goose-neck nozzle. It was stationed near Bedford and Main streets and is said to have been drawn to fires by oxen.

The second engine bought by the town was Hydraulion No. 2, first kept in Stone lane, off Central street, and later in the Niagara house on Pleasant street. It was a draught engine, having two decks and two sets of brakes, one worked by men standing on the ground and the other by men on a platform. It was never very popular with the citizens. Cataract No. 3, purchased in 1843, was housed at the corner of Franklin and Rock streets, while Niagara No. 4, of the same period, was stationed in the Niagara house on Pleasant street until 1853, and was later sent to North Main and Turner streets, with the new name of Torrent No. 2, and a new Niagara was purchased which remained in active service until 1865, and was used by a volunteer force at the Print Works fire in 1867. Ocean No. 5, bought in 1846, was kept on Pearl street, Mazeppa No. 7, formerly the property of the Massasoit Mfg. Co., was kept successively in the town house, the armory, Court square and at the corner of South Main street and Broadway. Other early engines were the Atlantic No. 6, owned by Hawes, Marvel & Davol, and kept at their machine shop, the Metropolis No. 7 and the Franklin. The last hand fire engine was the Cascade, which had belonged to the town of Fall River, R. I., and was kept on the west side of South Main street south of Columbia street and afterward at the Globe Print Works, and maintained by that company. In the early fifties an engine house having been built on present site of the Cascade house, the engine was placed there.

In addition to the regular fire companies there were several organizations known as Forcing Pump Companies, formed by the various manufacturing establishments. They were equipped with hand hose reels and attended all fires which their hose, when attached to the pumps at their factories, would reach. While they were not considered a part of the regular department, their election as firemen was subject to the approval of the fire wards, and they received a slight compensation from the town. They were also subject to fines for non-attendance. In 1832 there were

four of these companies, one at the Fall River Manufactory, one at Robeson's Print Works, one at the Pocasset mill and one at the Troy mill; one was later maintained by the Annawan Mfg. Co.

Nearly all the regular companies disbanded as fire companies in 1857, following the action of the city government in limiting the aggregate to be paid each company for compensation. They continued as social organizations. The Ocean and the Cataract Companies had bands of considerable note. The most prominent citizens of the town belonged to the fire companies during their days of active service.

The early companies sometimes made excursions to the neighboring cities, Newport, New Bedford and Providence. More notable than any of these, however, was the visit to New York on the steamer Bay State, made by the Cataract Company of 1847.

In the early days an alarm of fire was given by shouting and the ringing of bells, and methods were not much improved in 1854, when an ordinance adopted in that year, provided that immediately on an alarm of fire during the night, it should be the duty of the watchmen to give notice thereof by springing rattles, crying fire or ringing a bell, and mentioning the street or direction where the fire was. No bell was to be rung for a chimney fire, either by day or night.

For many years the bell on the Court House, on Court square was rung as a fire alarm. It was also rung at 7 A. M., 12 M., 1, 6 and 9 P. M., for the benefit of the people, the 9 P. M., bell served as a curfew, and this continued until 1874.

After 1832 until about 1868, officers of the department carried speaking trumpets as the insignia of office.

The Fall River Iron Works Co. early laid a pipe from the Watuppa dam to the Iron Works property at the foot of the hill, with several hydrants for fire purposes.

The first hose reel was secured in 1843 and stationed on Rock street. A four-wheeled hose reel was bought in 1851, and stationed at the Cataract House, and the first horse hose reel in 1863, kept in the Court Square building.

Like the other apparatus, the early hook and ladder trucks were small. The first was bought in 1826, kept on

Pleasant street, and drawn by hand. One purchased as late as 1871, was first drawn by hand and then changed to be used with a horse. The present No. 1, purchased in 1885, was the first in the state to be equipped for three horses abreast.

The first steamer, Quequechan No. 1, was bought in 1859, and replaced in 1871 and again in 1891. It was kept in the Court square building till the completion of the Prospect street house in 1874. The King Phliip, No. 2, was purchased in 1860, and also stationed at same place till it was removed to the Central engine house in 1871. Other early steam fire engines were the Metacomet, No. 3; the Niagara, No. 4; the Massasoit, No. 5; the Anawan, No. 6; and the Pocasset, No. 7, all bought before 1875.

Of the early engine houses, the Niagara, formerly known as Firemen's hall, was the stone building still standing on the south side of Pleasant street, between Second and Third, built in 1838 and sold in 1877. The Cataract, now occupied by the Fall River Veteran Firemen's Association, is at the corner of Rock and Franklin streets and was built in 1843. The Ocean house still standing on Pearl street, now occupied by the Defiance Veteran Firemen's Association, was built in 1845. The Court Square House, now occupied by the police, was formerly a livery stable and was purchased in 1857. The Central engine house was built in 1870 and enlarged in 1896, and the houses of the Anawan on North Main street, the Pocasset on Pleasant and the Massasoit on Freedom were erected in 1874, the Quequechan on Prospect street in 1875, and the present Niagara, on Plymouth avenue, in 1878. The Cascade house on South Main street replaced, in 1898, a structure put up by the town of Tiverton in the 50s.

The more recent fire department buildings and apparatus are: the Bogle Hill station on Pleasant street, erected in 1899, and occupied by Engine No. 9; a building corner South Main and Howe streets, erected in 1899, and occupied by combined hose and chemical apparatus No. 10; the Highland station, erected in 1909, used by a combination ladder and chemical truck.

The first Cascade auto equipment was installed September, 1909, and an auto combination hose was added in the same building in April, 1911.

The building at Maplewood was erected in 1910 and Hose No. 11 installed in it February, 1911.

Before 1829 the firemen were in charge of ten wardens elected annually. In that year the number was increased to 20, and in 1832 a fire department was formally established. After that time, members of companies received a small yearly compensation. The first permanent man was appointed in in 1860, as driver of Steamer No. 1, in Court Square. It was his duty, on an alarm, to take two horses belonging to the street department, and drive to the fire. Two additional drivers were appointed in 1865, and took turns at highway work with their teams. In 1873, the three men and their horses were placed permanently on duty at the engine houses. The next year, permanent engineers were appointed, and in 1886 a captain and hoseman for each engine. In 1894 the captains of all fire companies were made permanent, and since then the department has rapidly been brought to its present efficiency. It now has 126 permanent and 29 call men.

The fire alarm telegraph system was installed in 1870, and the first alarm given from box 16 on Jan. 27. The first chemical engine was bought in 1872 and the first extension truck of the aerial type in 1875, and first piece of automobile fire apparatus was bought in 1909.

The department came under the control of the fire commission when the city charter went into effect in 1903.

The dates of some of the more notable fires are: "The Great Fire", July 2, 1843; the Empire State, Jan. 13, 1849; the Micah Ruggles house, Jan. 24, 1857; Globe Print Works, Dec. 5, 1867; American Print Works, Dec. 15, 1867; Massasoit Steam Mill, Nov. 2, 1875; Granite Mills, Sept. 19, 1874; American Linen, June 29, 1876; Border City No. 1, Nov. 17, 1877; Chace's thread mill, Nov. 29, 1878; Flint Mill, Oct. 28, 1882; Sagamore, April 24, 1884; Langley's loom harness factory, (following a boiler explosion which killed four persons) June 14, 1895.

POLICE DEPARTMENT

The police department was established in 1844, when a night watch of six men was authorized. On the adoption of a city charter, a chief constable was appointed at $1.50 a day, with seven day assistants and eight night men. The title was changed to city marshal in 1857. By 1872 the force had been increased to 28 men, 22 of whom were on night duty. More men were added in 1873 and 1874, increasing the number to 70. On the opening of the northern, southern, and eastern stations, in 1874, the city was divided into four districts, and the hours of duty so arranged as not to leave the city unguarded for three hours during the day, as had formerly been the practice. The patrol wagon system went into effect in 1890, and late in 1910, the horse-drawn wagon was replaced by an automobile. The department was placed under a commission in 1894, and now numbers 154 men.

The early headquarters were in the Central street town house, later in the basement of city hall, and since 1857 in the present building on Court Square, now Purchase street, though this was shared with the fire and highway departments till the former was withdrawn in 1875 and the latter in 1879. The structure was then remodelled with rooms on the second floor for the district court, which continued to be used till January, 1911. The police department was then given the use of the entire building.

Bowenville extended from Cedar street to President avenue, west of North Main street. The Railroad Station formerly standing at the foot of Old Colony Avenue was called Bowenville.

Farmville extended from President avenue to George street, west of North Main street, north of this was "Slade's Ferry". After the construction of the Mechanics Mills in 1868, the name Farmville by common consent became Mechanicsville.

Steep Brook included the section from present Baldwin street northerly to Miller's Cove, from the shore as far east as the present Highland avenue.

Globe Village (in Tiverton) was the section having its center near the junction of present South Main street and Globe street.

Mt. Hope Village was the section near the Mt. Hope (now Conanicut) Mill.

Harrisonville adjoined Pleasant street near the location of Fourteenth street.

New Boston included the section on both sides of what are now New Boston road, Willow, Ruth, and Meridian streets as well as that portion of Wilson road east of Highland avenue as far as the pond.

Oak Grove Village comprises a section on both sides of Oak Grove Avenue from London street north to Oak Grove Cemetery, extending east to Freelove street.

Bigberry, the point of land jutting into the Quequechan river near present Sixteenth street.

"Mosquito Island" the location of the Wamsutta Steam Mills, now Massasoit Manufacturing Company, south of Pleasant street.

Rattlesnake Hill, section near the present location of Watuppa Freight Station.

Newville, section near Sucker Brook and Stafford road, now included in "Maplewood".

"Happy Hollow" was the ravine extending from Bay street to Mt. Hope Bay near present Birch street. This was a favorite resort for Sunday school picnics.

Adirondac Grove was on the easterly shore of North Watuppa pond near the present Fall River-Westport line. Excursions by steamer from a landing near the present Troy building were popular until 1872 when the construction of bridges across Quequechan river made the passage impracticable.

"Scotch Hole" a section near the present junction of Quequechan, Jefferson and Warren streets.

Flint Village included the section from County street (formerly Old Bedford road) southerly to Quequechan river and from Quequechan street easterly to Eastern avenue.

Town pump stood at southeast corner of city hall and was used until introduction of city water.

Indian Town, is the section east of North Watuppa pond extending from the Westport line northerly about one mile, deriving its name from an Indian settlement, which was on the Indian reservation at this location.

The Narrows—"This strait divides the pond into North Watuppa and South Watuppa." At one time "this strait was passed on a foot-bridge of stepping stones."—Fowler's History. It is now crossed by the roadway to Westport and New Bedford.

FALL RIVER

Founded, 1803.
Incorporated a city, 1854.
Area, including land and water, about 41 square miles.
Length of city, about 11 miles, width 7½ miles.
Assessed polls, April, 1910, 31,815.
Registered voters, 1910, males, 16,414, females, 2,380.
Dwellings, 10,005.
Tax, 1910, inclusive of polls, $1,793,183.73.
Rate of taxation, 1910, per $1,000, $18.70.
Public School Buildings, 52.
Pupils enrolled in Public Schools, 14,267.
Public Library, number of volumes, 83,951.
Post Office, receipts in 1825, $226; in 1910, $147,519.
Miles of Accepted Streets, 1911, 144.84.
Miles of Paved Streets, 1911, 16.47.
Miles of Sewers, 1911, 72.93.
Miles of Water Pipe, 1911, 112.585.
Fire Hydrants, 1911, 1,327.
Electric Arc Lights, 1911, 846.
Gas Lights, 1911, 447.
Kerosene Lights, 1911, 208.

Date	Population	Valuation	Spindles
1810	1,296		
1820	1,594		
1830	4,159		
1840	6,738	$ 2,978,597	32,084
1850	11,170	7,433,050	
1860	13,240	11,522,650	
1862			192,620
1870	27,191	23,612,214	544,606
1880	47,883	39,171,264	1,390,830
1890	74,918	53,395,908	2,164,664
1900	104,863	73,511,614	3,042,472
1910	119,295	92,488,520	3,943,036

	Incorporated	Capital	Spindles
American Linen Co.	1852	$800,000	94,528
Ancona Company	1903	300,000	40,080
Arkwright Mills	1897	450,000	68,432
Barnaby Mfg. Co.	1882	350,000	25,424
Barnard Mfg. Co.	1874	500,000	80,304
Border City Mfg. Co.	1880	1,000,000	121,228
Bourne Mills	1881	1,000,000	91,258
Chace Mills	1871	1,200,000	116,688
Charlton Mills	1910	800,000	52,000
Conanicut Mills	1880	300,000	29,412
Cornell Mills	1889	400,000	45,040
Davis Mills	1903	1,250,000	127,504
Davol Mills	1867	500,000	44,672
Durfee Mills	1866	500,000	143,952
Estes Mills	1905	300,000	7,000
Fall River Iron Works Co.	1825	2,000,000	488,000
Flint Mills	1872	1,160,000	107,000
Globe Yarn Mills	A		73,408
Granite Mills	1863	1,000,000	122,048
Hargraves Mills	1888	800,000	111,690
Kerr Thread Co.	B		105,732
King Philip Mills	1871	1,500,000	135,232
Laurel Lake Mills	1881	600,000	59,808
Lincoln Mfg. Co.	1906	700,000	62,800
Luther Mfg. Co.	1903	350,000	51,616
Massasoit Mfg. Co.	1882	500,000	
Mechanics Mills	1868	750,000	60,512
Merchants Mfg. Co.	1867	1,200,000	134,336
Narragansett Mills	1871	400,000	43,744
Osborn Mills	1871	750,000	70,332
Parker Mills	1895	800,000	111,684
Pilgrim Mills	1910	1,050,000	50,000
Pocasset Mfg. Co.	1822	1,200,000	120,016
Richard Borden Mfg. Co.	1871	1,000,000	101,024
Sagamore Mfg. Co.	1879	1,200,000	141,728
Sanford Spinning Co.	A		57,496

Seaconnet Mills	1884	600,000	68,384	
Shove Mills	1872	550,000	77,728	
Stafford Mills	1871	1,000,000	114,584	
Stevens Mfg. Co.	1892	700,000	16,764	C
Tecumseh Mills	1866	750,000	78,960	
Troy Cotton and Woolen Manufactory	1814	300,000	50,304	
Union Cotton Mfg. Co.	1879	1,200,000	110,320	
Wampanoag Mills	1871	750,000	84,760	
Weetamoe Mills	1871	500,000	45,504	
		$32,960,000	3,943,036	

A Owned by the New England Cotton Yarn Co.
B Owned by the American Thread Co.
C Equivalent to 63,000 print cloth spindles.

	Incorporated	Capital
Algonquin Printing Co.	1891	$500,000
American Printing Co.	1880	750,000
Ashworth Brothers, Inc.	1910	400,000
Fall River Electric Light Co.	1883	800,000
Fall River Gas Works Co.	1880	690,000
Heywood Narrow Fabric Co.	1900	40,000
Kilburn, Lincoln & Co.	1854	80,000
Old Colony Breweries Co.	1896	1,500,000
Standard Fabric Co.	1910	150,000
Union Belt Co.	1871	72,000

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1811 1911

MERCHANTS—MANUFACTURERS

COTTON CENTENNIAL CARNIVAL

ONE HUNDREDTH ANNIVERSARY CELEBRATION OF THE BUILDING OF THE FIRST COTTON MILL IN FALL RIVER

WEEK OF JUNE 19—24, 1911

MONDAY. *MANUFACTURERS DAY.*

2.30 P.M. Crowning of the Queen of the Carnival at City Hall by Mayor T. F. Higgins.

4.00 Opening:
Manufacturers Exposition, State Armory.
Art Exhibit, Public Library.
Cotton Manufacturing, Bradford Durfee Textile School.
Historical Exhibit, Music Hall.

TUESDAY. *AUTOMOBILE DAY.*

3.00 Automobile Parade.

8.00 Fireworks Display at South Park.

WEDNESDAY. *FALL RIVER DAY.*

3.00 Trades Parade.

THURSDAY. *MERCHANTS DAY.*

1.00 Horse Show, North Park.

8.00 Grand Carnival Parade.

FRIDAY. *PRESIDENT'S DAY.*

1.00 President Taft will visit the city.

Evening. Grand Confetti Carnival.

SATURDAY. *AVIATION DAY.*

Water Carnival on Mount Hope Bay.

Hydro-aeroplane Exhibition by Glenn H. Curtiss.

As a part of the observance of the centennial, a notable exhibit of the products of the various industries of the city has been arranged in the State Armory. The great drill hall has been most attractively decorated in blue, completely hiding the roof, and the same color has been used in the various booths, which are adorned with branches and oak leaves. In addition to the products themselves the processes of manufacture are illustrated in many cases by machinery in operation, showing the methods used in the making of hats, pianos, card clothing, the printing of calico, the fringing of quilts, as well as in the weaving of cloth on the most modern looms, etc.

The processes of cotton manufacturing are chiefly shown in the textile school near the armory, where machinery of the same type as that used in the mills of the city, is in operation. In the same building is also shown the work of the students of the school produced from this machinery.

An excellent art exhibit of pictures loaned by citizens has been arranged in the public library and also a display of work prepared in the public schools.

In Music Hall is an interesting historical exhibit.